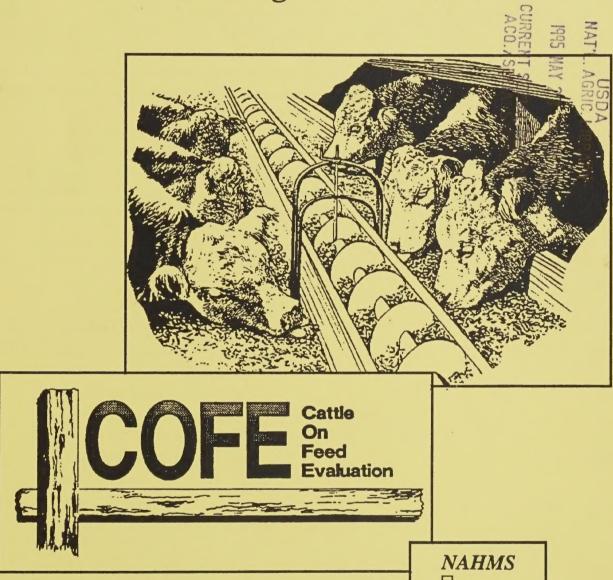
### **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



## Part I:

**Feedlot Management Practices** 



January 1995

#### Acknowledgements

This report has been prepared from material received and analyzed by the U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS).

The Cattle on Feed Evaluation was a cooperative effort between State and Federal agricultural statisticians, animal health officials, university researchers, and extension personnel. We want to thank the National Agricultural Statistics Service (NASS) enumerators and State and Federal Veterinary Medical Officers (VMO's) who visited the farms and collected the data for their hard work and dedication to the National Animal Health Monitoring System (NAHMS).

The roles of the producer, Area Veterinarian in Charge (AVIC), NAHMS Coordinator, Veterinary Medical Officer (VMO), Animal Health Technician (AHT), and NASS enumerators were critical in providing quality data for this report. All participants are to be commended for their efforts, particularly the producers whose voluntary efforts made the study possible.

Dr. Al Strating, Director

Centers for Epidemiology & Animal Health

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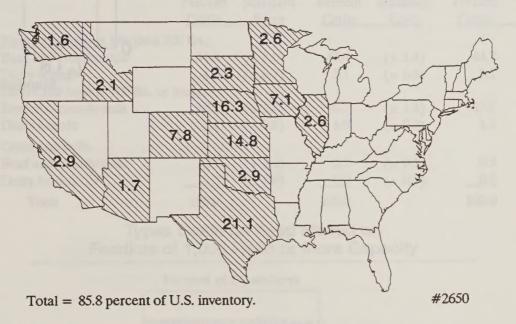
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### Introduction

As part of the National Animal Health Monitoring System (NAHMS), the USDA:APHIS:Veterinary Services (VS) conducted a National feedlot study designed to provide both participants and the industry with information on feedlot animal health, productivity, and management practices. This report is the first of a two-part release of National information resulting from the Cattle on Feed Evaluation (COFE).

Data for *Part I: Feedlot Management Practices* were collected from August 1 through September 16, 1994. The USDA's National Agricultural Statistics Service (NASS) collaborated with VS to select a producer sample (3,214 feedlots) that was statistically designed to provide inferences to the nation's feedlot animal population. Included in the study were 13 major cattle-on-feed States that accounted for 85.8 percent of the U.S. cattle-on-feed inventory as of January 1, 1994 (shown below).

States Participating in the NAHMS Cattle on Feed Evaluation and Percent of U.S. Cattle-on-Feed Inventory, January 1, 1994



NASS telephone interviewers contacted 2,070 producers whose feedlot had less than 1,000-head, one-time capacity, while 1,144 producers with larger feedlots were contacted personally.

Descriptive tables in this report are population estimates, such as averages and proportions which have been weighted to represent the population. Most of the estimates are provided with a measure of variability called the standard error and denoted by  $(\pm)$ . Chances are 95 out of 100 that the interval created by the estimate plus or minus two standard errors will contain the true population value. In the example

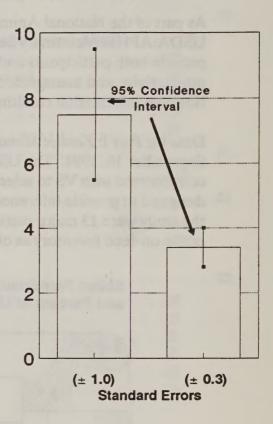
at right, an estimate of 7.5 with a standard error of  $\pm$  1.0 results in a range of 5.5 to 9.5 (two times the standard error above and below the estimate).

Data for Part II: Feedlot Health Management Practices were collected by State and Federal Veterinary Medical Officers from October 3 through December 21, 1994. The second report is scheduled for release in April 1995.

If you have questions about this report contact NAHMS at:

Centers for Epidemiology and Animal Health USDA:APHIS:VS, Attn. NAHMS 555 South Howes, Suite 200 Fort Collins, Colorado 80521 (303) 490-7800 Internet: NAHMS-INFO@aphis.usda.gov

## Examples of 95% Confidence Intervals



#999a<sup>1</sup>

<sup>1</sup> Identification numbers are assigned to each graph in this report for public reference.

### **Section I: Population Estimates**

#### 1. Placement Profile and Disposition

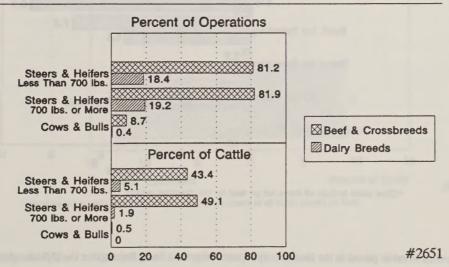
a.	Percent of operations	that placed	the following	types of cattle on fee	d:
----	-----------------------	-------------	---------------	------------------------	----

		Small (< 1,000 Head)		Large (1,00	00+ Head)	Total	
		Percent	Standard	Percent	Standard	Percent	Standard
		<b>Operations</b>	Error	<b>Operations</b>	Error	<b>Operations</b>	Error
i.	Steers and heifers less than '	700 lbs.:					
	Beef and crossbreeds	70.7	$(\pm 2.7)$	81.2	$(\pm 1.5)$	71.2	$(\pm 2.6)$
	Dairy breeds	14.8	(± 2.2)	18.4	$(\pm 1.1)$	15.0	$(\pm 2.1)$
ii.	Steers and heifers 700 lbs. or	r more:					
	Beef and crossbreeds	26.0	$(\pm 2.5)$	81.9	$(\pm 1.5)$	28.5	$(\pm 2.4)$
	Dairy breeds	6.0	$(\pm 1.3)$	19.2	$(\pm 1.3)$	6.6	$(\pm 1.2)$
iii.	Cows and bulls:						
	Beef and crossbreeds	1.0	$(\pm 0.7)$	8.7	$(\pm 1.0)$	1.4	$(\pm 0.7)$
	Dairy breeds	0.1	$(\pm 0.1)$	0.4	$(\pm 0.1)$	0.1	$(\pm 0.1)$

b. Percent of cattle placed by the following types of cattle on feed:

		Small (< 1	,000 Head)	Large (1,0	00+ Head)	Te	<u>otal</u>
		Percent	Standard	Percent	Standard	Percent	Standard
		Cattle	Error	Cattle	Error	Cattle	Error
i.	Steers and heifers less than	700 lbs.:					
	Beef and crossbreeds	54.6	$(\pm 3.0)$	43.4	$(\pm 1.4)$	44.7	$(\pm 1.3)$
	Dairy breeds	4.6	$(\pm 0.7)$	5.1	$(\pm 0.6)$	5.1	$(\pm 0.5)$
ii.	Steers and heifers 700 lbs.	or more:					
	Beef and crossbreeds	38.1	$(\pm 3.0)$	49.1	$(\pm 1.3)$	47.8	$(\pm 1.2)$
	Dairy breeds	2.4	$(\pm 0.6)$	1.9	$(\pm 0.2)$	1.9	$(\pm 0.2)$
iii.	Cows and bulls						
	Beef and crossbreeds	0.3	$(\pm 0.2)$	0.5	$(\pm 0.1)$	0.5	$(\pm 0.1)$
	Dairy breeds	0.0	$(\pm 0.0)$	0.0	$(\pm 0.0)$	0.0	$(\pm 0.0)$
	Total	100.0		100.0		100.0	

## Types Cattle on Feed Placed on Feedlots of 1,000 Head or More Capacity



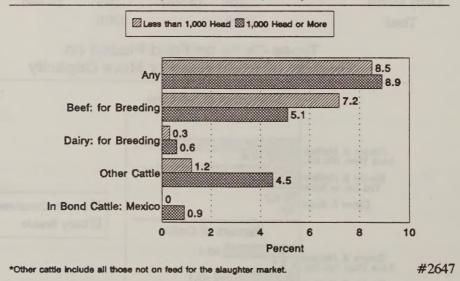
c. Percent of placements that were:

		Small (< 1.0	00 Head)	Large (1	.000+ Hea	d) To	tal
		Percent	Standard	Percent	Standard	Percent	Standard
i.	Beef	<b>Placements</b>	Error	<b>Placements</b>	Error	Placements	Error
	Steers	62.2	$(\pm 2.3)$	65.4	$(\pm 0.9)$	65.0	$(\pm 0.8)$
	Heifers	37.5	$(\pm 2.3)$	34.1	$(\pm 0.9)$	34.5	$(\pm 0.8)$
	Cows and Bulls	0.3	$(\pm 0.2)$	_0.5	$(\pm 0.1)$	0.5	(± 0.1)
	Total	100.0		100.0		100.0	
		Small (< 1.0	000 Head)	Large (100	0+ Head)	To	ta1
		Samuel Car	200 Houd	Largottion	O I TIONG!		MAA.
		Percent	Standard	Percent	Standard	Percent	Standard
ii.	Dairy		Standard		Standard		
ii.	<u>Dairy</u> Steers	Percent	Standard	Percent	Standard	Percent	Standard
ii.		Percent Placements	Standard Error	Percent Placements	Standard Error	Percent Placements	Standard Error
ii.	Steers	Percent Placements 96.1	Standard Error (± 1.3)	Percent Placements 97.2	Standard Error (± 0.9)	Percent Placements 97.0	Standard Error (± 0.8)

d. Percent of operations with 'other' cattle in the feedlot<sup>1</sup>:

10-10-10-10-10-10-10-10-10-10-10-10-10-1	Small (< 1.	000 Head)	To	otal		
	Percent	Standard	Percent	Standard	Percent	Standard
Commodity	<b>Operations</b>	Error	<b>Operations</b>	Error	<b>Operations</b>	Error
Any other cattle	8.5	$(\pm 2.6)$	8.9	$(\pm 1.0)$	8.5	$(\pm 2.5)$
Beef animals to be used for						
breeding	7.2	$(\pm 2.6)$	5.1	$(\pm 0.8)$	7.1	$(\pm 2.5)$
Dairy animals to be used for						
breeding	0.3	$(\pm 0.2)$	0.6	$(\pm 0.2)$	0.3	$(\pm 0.2)$
Other cattle	1.2	$(\pm 0.7)$	4.5	$(\pm 0.7)$	1.4	$(\pm 0.7)$
In bond cattle from Mexico	0.0	$(\pm 0.0)$	0.9	$(\pm 0.2)$	0.0	$(\pm 0.0)$

# Percent of Operations with 'Other\*' Cattle in Feedlots by Feedlot Capacity



<sup>1</sup> Other cattle refers to cattle placed in the feedlot for purposes other than being finished for the U.S. slaughter market.

#2653

e. Percent of disposed animals by disposition category:

	Small (< 1,000 Head)		Large (1.00	0+ Head)	To	tal
	Percent	Standard	Percent	Standard	Percent	Standard
Category	Placements	Error	<b>Placements</b>	Error	<b>Placements</b>	Error
Marketed for slaughter	96.5	$(\pm 0.5)$	95.8	$(\pm 0.5)$	95.9	$(\pm 0.4)$
Culled, sent to market prior to				` ′		
slaughter weight	0.2	$(\pm 0.1)$	0.4	$(\pm 0.1)$	0.4	$(\pm 0.1)$
Returned to grazing forage	1.5	$(\pm 0.5)$	1.6	$(\pm 0.2)$	1.6	$(\pm 0.2)$
Shipped to another feedlot	0.7	$(\pm 0.2)$	1.1	$(\pm 0.3)$	1.0	$(\pm 0.3)$
Died	1.0	$(\pm 0.1)$	1.1	$(\pm 0.0)$	1.1	$(\pm 0.0)$
Stolen	0.0	$(\pm 0.0)$	0.0	$(\pm 0.0)$	0.0	$(\pm 0.0)$
Lost for other reasons	_0.1	$(\pm 0.0)$	_0.0	$(\pm 0.0)$	_0.0	$(\pm 0.0)$
Total	100.0		100.0		100.0	

#### 2. Source of Placements

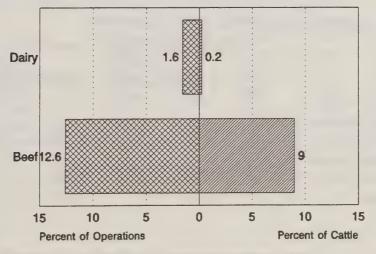
a. Percent of operations (and cattle on these operations) placing cattle of Mexican origin (and identified with M brand):

Small (< 1.000 Head) Large (1.000+ Head)

Total

th M brand):		,000 Head)	Large (1,00	00+ Head)	To	Total Standard	
		Standard		Standard		Standard	
	Percent	Error	Percent	Error	Percent	Error	
Operations:							
Dairy cattle	0.1	$(\pm 0.1)$	1.6	$(\pm 0.3)$	0.2	$(\pm 0.1)$	
Beef cattle	0.1	$(\pm 0.1)$	12.6	$(\pm 0.7)$	0.7	$(\pm 0.1)$	
All	0.1	$(\pm 0.1)$	12.8	$(\pm 0.7)$	0.7	$(\pm 0.1)$	
Cattle:	,						
Dairy cattle <sup>1</sup>	0.0	$(\pm 0.0)$	0.2	$(\pm 0.1)$	0.2	$(\pm 0.1)$	
Beef cattle <sup>1</sup>	0.0	$(\pm 0.0)$	9.0	$(\pm 1.1)$	7.9	$(\pm 0.9)$	
All	0.0	$(\pm 0.0)$	9.2	$(\pm 1.1)$	8.1	$(\pm 1.0)$	
	Operations: Dairy cattle Beef cattle All Cattle: Dairy cattle 1 Beef cattle 1	Percent  Operations:  Dairy cattle  Beef cattle  All  Cattle:  Dairy cattle  0.0  Beef cattle  0.0  0.0			$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	

Percent of Operations with 1,000 Head or More Capacity and Cattle on These Operations Placing Cattle of Mexican Origin



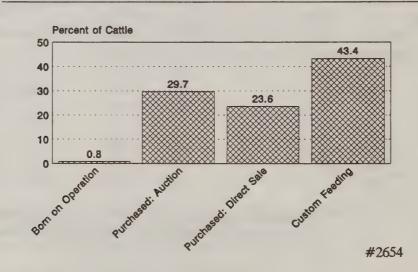
\*Mexican-origin dairy and beef cattle placed as a percent of all cattle placed on feed.

<sup>1</sup> Mexican-origin beef and dairy cattle placed as a percent of all cattle placed on feed.

b. Percent of cattle placed on feed that were:

·	Small (< 1.000 Head)		Large (1.0	00+ Head)	Total	
	Percent	Standard	Percent	Standard	Percent	Standard
Source	Cattle	Error	Cattle	Error	Cattle	Error
Born on this operation or another	r oper-					
ation operated by this feedlo	$N/A^1$	N/A <sup>1</sup>	0.8	$(\pm 0.1)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Purchased via auction	N/A <sup>1</sup>	N/A <sup>1</sup>	29.7	$(\pm 1.2)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Purchased via direct sale (cash or	•					
video, private treaty)	N/A <sup>1</sup>	N/A <sup>1</sup>	23.6	$(\pm 1.5)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Provided for custom feeding	N/A <sup>1</sup>	N/A <sup>1</sup>	43.4	$(\pm 1.7)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Other source	N/A <sup>1</sup>	N/A <sup>1</sup>	2.5	$(\pm 0.8)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Total			100.0			

# Source of Cattle Placed on Feed on Operations of 1,000 Head or More Capacity



#### c. Percent of cattle placed on feed that were owned by:

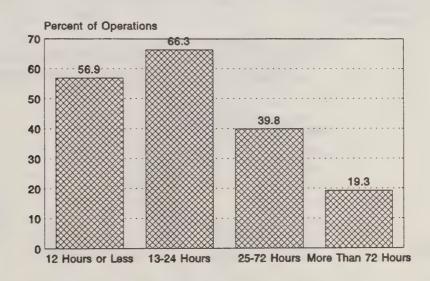
		Small (< 1,000 Head)		Large (1.000+ Head)		Total	
			Standard		Standard		Standard
		Percent	Error	Percent	Error	Percent	Error
i.	This feedlot	N/A <sup>1</sup>	N/A <sup>1</sup>	26.1	(± 1.4)	N/A <sup>1</sup>	N/A <sup>1</sup>
ii.	Joint feedlot ownership with others	N/A <sup>1</sup>	N/A <sup>1</sup>	8.2	(± 0.5)	N/A <sup>1</sup>	N/A <sup>1</sup>
iii.	Others (cattle being custom fed for others)	N/A <sup>1</sup>	N/A <sup>1</sup>	65.7	(± 1.5)	N/A <sup>1</sup>	N/A <sup>1</sup>
	Total			100.0			

#### 3. Placement Processing

a. Percent of operations<sup>1</sup> initially processing some cattle as a group during the following time periods after

Small (< 1,	uu Head)	Large (1.00	U+ Head)	10	tal
Percent	Standard	Percent	Standard	Percent	Standard
Operations	Error	<b>Operations</b>	Error	<b>Operations</b>	Error
N/A <sup>2</sup>	$N/A^2$	56.9	$(\pm 1.8)$	$N/A^2$	$N/A^2$
N/A <sup>2</sup>	$N/A^2$	66.3	$(\pm 1.8)$	N/A <sup>2</sup>	$N/A^2$
$N/A^2$	$N/A^2$	39.8	$(\pm 1.8)$	$N/A^2$	$N/A^2$
N/A <sup>2</sup>	$N/A^2$	19.3	$(\pm 1.5)$	N/A <sup>2</sup>	$N/A^2$
N/A <sup>2</sup>	N/A <sup>2</sup>	5.0	$(\pm 0.8)$	N/A <sup>2</sup>	$N/A^2$
	Percent Operations N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup>	Operations Error $ \begin{array}{ccc} N/A^2 & N/A^2 \\ N/A^2 & N/A^2 \\ N/A^2 & N/A^2 \\ N/A^2 & N/A^2 \end{array} $	Percent Standard Percent  Operations Error Operations  N/A <sup>2</sup> N/A <sup>2</sup> 56.9  N/A <sup>2</sup> N/A <sup>2</sup> 66.3  N/A <sup>2</sup> N/A <sup>2</sup> 39.8  N/A <sup>2</sup> N/A <sup>2</sup> 19.3	Percent Standard Percent Standard Operations Error Operations Error $N/A^2$	Percent Standard Percent Standard Percent Operations Error Operations Error Operations N/A <sup>2</sup> N/A <sup>2</sup> S6.9 ( $\pm$ 1.8) N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> 66.3 ( $\pm$ 1.8) N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> 39.8 ( $\pm$ 1.8) N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> 19.3 ( $\pm$ 1.5) N/A <sup>2</sup>

# Percent of Operations Processing Cattle as a Group After Arrival by Time Period



#2657

b. Percent of placements initially processed as a group within the following time periods:

	Small (< 1,000 Head)		Large (1,0	arge (1,000+ Head)		<u>otal</u>
	Number	Standard	Number	Standard	Number	Standard
Time Period	Hours	Error	Hours	Error	Hours	Error
12 hours or less after arrival	$N/A^2$	$N/A^2$	42.4	$(\pm 2.0)$	$N/A^2$	$N/A^2$
13-24 hours after arrival	$N/A^2$	$N/A^2$	44.9	$(\pm 1.9)$	$N/A^2$	$N/A^2$
25-72 hours after arrival	$N/A^2$	$N/A^2$	10.3	$(\pm 0.7)$	$N/A^2$	$N/A^2$
More than 72 hours after arrival	$N/A^2$	$N/A^2$	2.0	$(\pm 0.2)$	$N/A^2$	$N/A^2$
Not processed after arrival	N/A <sup>2</sup>	N/A <sup>2</sup>	0.4	$(\pm 0.1)$	N/A <sup>2</sup>	$N/A^2$
Total			100.0			

<sup>1</sup> An operation may be counted in multiple categories.

N/A = data not collected.

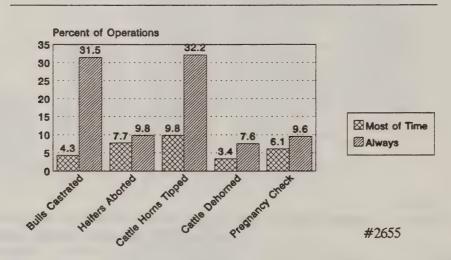
c. Processing practices for large operations (1,000+ head)

i. Percent of feedlots using selected management practices on cattle during the first 30 days after arrival at the feedlot:

Percent of Operations

at allo receieu	TOTAL CONTRACTOR OF THE PROPERTY OF THE PROPER					
			Most of		None	
Management Practice	Never	Sometimes	the Time	Always	Processed <sup>1</sup>	Total
Bulls castrated	36.2	19.5	4.3	31.5	8.5	100.0
Standard Error	$(\pm 1.8)$	$(\pm 1.5)$	$(\pm 0.7)$	$(\pm 1.5)$	$(\pm 1.1)$	
Heifers aborted	43.9	30.3	7.7	9.8	8.3	100.0
Standard Error	$(\pm 1.8)$	$(\pm 1.7)$	$(\pm 0.9)$	$(\pm 1.1)$	$(\pm 1.0)$	
Cattle horns tipped	34.3	19.1	9.8	32.2	4.6	100.0
Standard Error	$(\pm 1.8)$	$(\pm 1.4)$	$(\pm 1.1)$	$(\pm 1.6)$	$(\pm 0.8)$	
Cattle dehorned	62.9	20.2	3.4	7.6	5.9	100.0
Standard Error	$(\pm 1.8)$	$(\pm 1.5)$	$(\pm 0.7)$	$(\pm 1.0)$	$(\pm 0.9)$	
Intact (nonspayed) heifers						
pregnancy checked	46.1	31.7	6.1	9.6	6.5	100.0
Standard Error	$(\pm 1.9)$	$(\pm 1.7)$	$(\pm 0.9)$	$(\pm 1.1)$	$(\pm 1.0)$	

## Use of Selected Processing Practices on Feedlots of 1,000 Head or More Capacity



ii. Percent of feedlots using animal identification during the first 30 days after arrival at the feedlot:

Percent of Operations

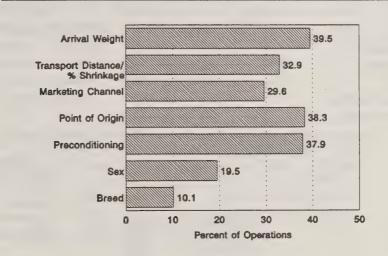
	Telectic of Operations							
			Most of		None			
Management Practice	Never	Sometimes	the Time	Always	Processed	Total		
Identification - Individual: Cattle & calves tagged or otherwise individually with a unique number								
	46.9	14.0	2.9	32.7	3.5	100.0		
Standard Error	$(\pm 1.9)$	$(\pm 1.4)$	$(\pm 0.6)$	$(\pm 1.7)$	$(\pm 0.7)$			
Identification - Owner: Animals identified with a group or owner identifier								
	26.7	8.8	5.3	56.9	2.3	100.0		
Standard Error	$(\pm 1.7)$	$(\pm 1.1)$	$(\pm 0.9)$	$_{1}(\pm 1.7)$	$(\pm 0.6)$			

No animals were processed that would have been eligible for the procedure of interest, e.g., no bulls were processed in this feedlot. This is in contrast to the 'never' category which implies that some animals were processed that would have been eligible for the procedure, but were not subjected to it.

d. Percent of operations that change procedures for processing new arrivals based upon each of the

following:	Small (< 1,000 Head)		Large (1.00	0+ Head)	Total	
	Percent	Standard	Percent	Standard	Percent	Standard
<u>Item</u>	<b>Operations</b>	Error	<b>Operations</b>	Error	<b>Operations</b>	Error
Arrival weight	N/A <sup>1</sup>	N/A <sup>1</sup>	39.5	$(\pm 1.8)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Distance transported/percent						
shrinkage	N/A <sup>1</sup>	N/A <sup>1</sup>	32.9	$(\pm 1.7)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Marketing channel used	N/A <sup>1</sup>	N/A <sup>1</sup>	29.6	$(\pm 1.7)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Point of origin	N/A <sup>1</sup>	N/A <sup>1</sup>	38.3	$(\pm 1.8)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Preconditioning	N/A <sup>1</sup>	N/A <sup>1</sup>	37.9	$(\pm 1.8)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Sex	N/A <sup>1</sup>	N/A <sup>1</sup>	19.5	$(\pm 1.3)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Breed	N/A <sup>1</sup>	N/A <sup>1</sup>	10.1	$(\pm 1.0)$	N/A <sup>1</sup>	N/A <sup>1</sup>

Percent of Operations That Change Processing Procedures for New Arrivals by Selected Criteria



#2656

e. Percent of large operations (1,000+ head) that provide new arrivals with:

1 order of ange of courses (2,5				Standard	Additional	Standard
Frequency	Pen Space	Error	Waterers	Error	Bunk Space	Error
Never	38.7	$(\pm 1.8)$	40.8	$(\pm 1.9)$	33.9	$(\pm 1.8)$
Sometimes	29.9	$(\pm 1.7)$	30.1	$(\pm 1.7)$	28.2	$(\pm 1.7)$
Most of the time	17.0	$(\pm 1.4)$	14.5	$(\pm 1.3)$	19.3	$(\pm 1.4)$
Always	<u>_14.4</u>	$(\pm 1.3)$	14.6	$(\pm 1.3)$	<u> 18.6</u>	$(\pm 1.5)$
Total	100.0		100.0		100.0	

f. Percent of operations processing cattle a second time within 30 days after arrival and percent of cattle being processed a second time:

		<u>Small (&lt; 1</u>	Small (< 1.000 Head)		Large (1.000+ Head)		Total	
		·	Standard		Standard		Standard	
		Percent	Error	Percent	Error	Percent	Error	
i.	Operations	N/A <sup>1</sup>	N/A <sup>1</sup>	65.1	$(\pm 1.8)$	N/A <sup>1</sup>	N/A <sup>1</sup>	
ii.	Cattle	N/A <sup>1</sup>	N/A <sup>1</sup>	24.4	(± 1.4)	N/A <sup>1</sup>	N/A <sup>1</sup>	

Percent of operations using the same pens for receiving and shipping cattle:

Small (< 1.000 Head)		Large (1.00)	0+ Head)	Total		
Percent	Standard	Percent	Standard	Percent	Standard	
<b>Operations</b>	Error	<b>Operations</b>		<b>Operations</b>		
N/A <sup>1</sup>	N/A <sup>1</sup>	66.1	$(\pm 1.8)$	N/A <sup>1</sup>	N/A <sup>1</sup>	

#### 4. Branding and Identification

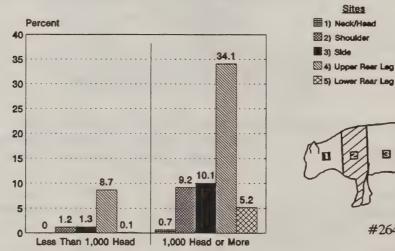
a. Percent of operations (and cattle on feed on these operations) that hide branded cattle received in the last

st 12 months:	<u>Small (&lt; 1</u>	Small (< 1,000 Head)		<u>Large (1,000+ Head)</u>		Total	
		Standard		Standard		Standard	
	Percent	Error	Percent	Error	Percent	Error	
Operations	11.2	$(\pm 2.5)$	42.9	$(\pm 1.7)$	12.7	$(\pm 2.4)$	
Cattle	18.5	$(\pm 3.0)$	33.8	$(\pm 2.2)$	32.0	$(\pm 2.0)$	

b. Percent of all operations and all cattle branded by site:

Operations	Small (< 1,000 Head	i) Large (1,000+ Head	<u>Total</u>	
	Percent Standar	d Percent Standard	Percent Standard	
Site	Operations Error	Operations Error	Operations Error	
Neck/Head	$0.0 (\pm 0.0)$	$0.7   (\pm 0.2)$	$< 0.1  (\pm < 0.1)$	
Shoulder	1.2 $(\pm 0.6)$	9.2 (± 1.1)	$1.6  (\pm 0.5)$	
Side	1.3 $(\pm 0.6)$	$10.1   (\pm 1.1)$	$1.7   (\pm 0.6)$	
Upper rear leg	8.7 (± 2.4)	$34.1   (\pm 1.7)$	9.9 (± 2.3)	
Lower rear leg	$0.1 (\pm 0.1)$	$5.2   (\pm 0.8)$	$0.4 (\pm 0.1)$	

#### Percent of Operations Branding by Site & Feedlot Capacity





ii.	Cattle branded	Small (< 1,000 Head)		Large (1,000+ Head)		Total	
		Percent	Standard	Percent	Standard	Percent	Standard
	Site	Cattle	Error	Cattle	Error	Cattle	Error
	Neck/Head	0.0	$(\pm 0.0)$	0.3	$(\pm 0.1)$	0.3	$(\pm 0.1)$
	Shoulder	1.6	$(\pm 0.7)$	1.9	$(\pm 0.3)$	1.9	$(\pm 0.3)$
	Side	3.1	$(\pm 1.8)$	1.6	$(\pm 0.2)$	1.8	$(\pm 0.3)$
	Upper rear leg	10.4	$(\pm 2.1)$	15.4	$(\pm 1.5)$	14.8	$(\pm 1.3)$
	Lower rear leg	0.7	$(\pm 0.7)$	1.0	$(\pm 0.3)$	0.9	$(\pm 0.2)$
	Not hide branded	84.3	$(\pm 2.7)$	79.8	$(\pm 1.6)$	80.3	(± 1.4)

N/A = data not collected.

#### 5. Pen Riding or Walking Protocols

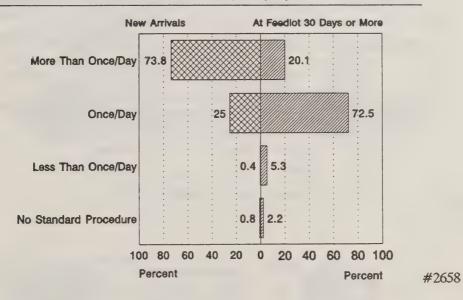
- a. Percent of operations using the following pen riding or walking protocols
  - i. For new arrivals (at feedlot less than 30 days):

	Small (< 1,000 Head)		Large (1.00	0+ Head)	<u>Total</u>	
	Percent	Standard	Percent	Standard	Percent	Standard
Protocol Frequency	<b>Operations</b>	Error	<b>Operations</b>	Error	<b>Operations</b>	Error
More than once a day	N/A <sup>1</sup>	N/A <sup>1</sup>	73.8	$(\pm 1.7)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Once a day	N/A <sup>1</sup>	N/A <sup>1</sup>	25.0	$(\pm 1.6)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Every other day	N/A <sup>1</sup>	N/A <sup>1</sup>	0.4	$(\pm 0.3)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Every third day or more	N/A <sup>1</sup>	$N/A^1$	0.0	$(\pm 0.0)$	N/A <sup>1</sup>	N/A <sup>1</sup>
No standard procedure	N/A <sup>1</sup>	N/A <sup>1</sup>	0.8	$(\pm 0.3)$	N/A <sup>1</sup>	N/A <sup>1</sup>

ii. For those animals at feedlot 30 days or more:

	Small (< 1.000 Head)		Large (1.00	0+ Head)	Total	
	Percent	Standard	Percent	Standard	Percent	Standard
Protocol Frequency	<b>Operations</b>	Error	<b>Operations</b>	Error	<b>Operations</b>	Error
More than once a day	N/A <sup>1</sup>	N/A <sup>1</sup>	20.1	$(\pm 1.5)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Once a day	N/A <sup>1</sup>	N/A <sup>1</sup>	72.5	$(\pm 1.7)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Every other day	N/A <sup>1</sup>	N/A <sup>1</sup>	2.7	$(\pm 0.7)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Every third day or more	N/A <sup>1</sup>	N/A <sup>1</sup>	2.6	$(\pm 0.7)$	N/A <sup>1</sup>	N/A <sup>1</sup>
No standard procedure	N/A <sup>1</sup>	N/A <sup>1</sup>	2.2	$(\pm 0.6)$	N/A <sup>1</sup>	N/A <sup>1</sup>

## Pen Riding or Walking Protocols on Feedlots of 1,000 Head or More Capacity by Time on Feedlot



#### 6. Nutritional Management - Implants

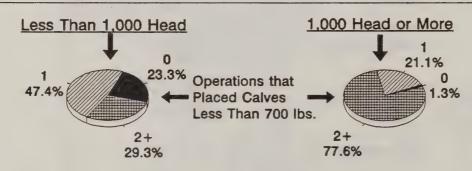
a. For calves less than 700 lbs. when placed, percent of calves implanted by number of times implanted:

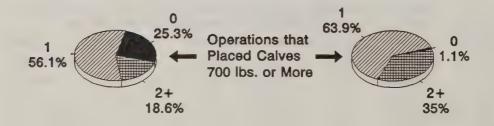
	Small (< 1,000 Head)		Large (1.0	00+ Head)	Total	
		Standard		Standard		Standard
Number of Times	Percent	Error	Percent	Error	Percent	Error
0	23.3	$(\pm 2.8)$	1.3	$(\pm 0.2)$	4.3	$(\pm 0.4)$
1	47.4	$(\pm 4.0)$	21.1	$(\pm 1.6)$	24.8	$(\pm 1.5)$
2 or More	<u>29.3</u>	$(\pm 3.9)$	<u>77.6</u>	$(\pm 1.6)$	_70.9	$(\pm 1.6)$
Total	100.0		100.0		100.0	

b. For calves 700 lbs. or more when placed, percent of calves implanted by number of times implanted:

	Small (< 1,000 Head)		Large (1.0	00+ Head)	<u>Total</u>	
		Standard		Standard		Standard
Number of Times	Percent	Error	Percent	Error	Percent	Error
0	25.3	$(\pm 4.5)$	1.1	$(\pm 0.2)$	3.4	$(\pm 0.5)$
1	56.1	$(\pm 4.5)$	63.9	$(\pm 2.1)$	63.1	$(\pm 2.0)$
2 or More	<u> 18.6</u>	$(\pm 3.1)$	_35.0	$(\pm 2.2)$	33.5	$(\pm 2.0)$
Total	100.0		100.0		100.0	

# Operation Average Percent of Cattle Implanted by Number of Times Implanted and Feedlot Capacity





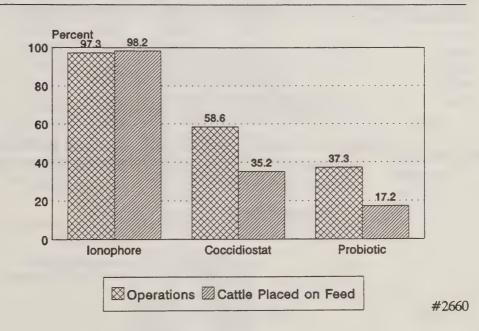
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#### 7. Nutritional Management - Addititives

a. Percent of operations that fed (and percent of cattle placed that were fed) the following additives:

i. Operations	Small (< 1,	000 Head)	Large (1.00	00+ Head)	Total	
		Standard		Standard		Standard
Additive	Percent	Error	Percent	Error	Percent	Error
Ionophore <sup>1</sup>	$N/A^2$	$N/A^2$	97.3	$(\pm 0.6)$	$N/A^2$	$N/A^2$
Coccidiostat <sup>3</sup>	N/A <sup>2</sup>	$N/A^2$	58.6	(± 1.8)	$N/A^2$	$N/A^2$
Probiotic	N/A <sup>2</sup>	N/A <sup>2</sup>	37.3	(± 1.8)	N/A <sup>2</sup>	$N/A^2$
ii. Cattle placed on feed	Small (<	1,000 Head)	Large (1.	000+ Head)	T	otal
		Standard		Standard		Standard
Additive	Percent	Error	Percent	Error	Percent	Error
Ionophore <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	98.2	$(\pm 0.5)$	$N/A^2$	$N/A^2$
Coccidiostat <sup>3</sup>	N/A <sup>2</sup>	$N/A^2$	35.2	$(\pm 2.4)$	$N/A^2$	$N/A^2$
Probiotic	N/A <sup>2</sup>	N/A <sup>2</sup>	17.2	(± 1.6)	$N/A^2$	$N/A^2$

# Percent of Operations (and Cattle Placed) That Fed Selected Additives



Ionophore such as Rumensin, Bovatec, or Cattlyst.

<sup>2</sup> N/A = data not collected.

<sup>3</sup> Coccidiostat other than an ionophore such as Corid or Deccox.

#### 8. Nutritional Management - Other

a. For operations placing female cattle, percent of operations feeding MGA<sup>1</sup>:

Small (< 1.0	000 Head)	Large (1.00	0+ Head)	Total		
Percent	Standard	Percent	Standard	Percent	Standard	
<b>Operations</b>	Error	<b>Operations</b>		<b>Operations</b>		
N/A <sup>2</sup>	N/A <sup>2</sup>	63.7	(± 1.9)	N/A <sup>2</sup>	N/A <sup>2</sup>	

b. For operations placing female cattle, percent of operations by percent of females fed MGA<sup>1</sup>:

Percent Females Fed MGA <sup>1</sup>	Percent Operations	Standard Error
0	36.3	$(\pm 2.0)$
1-24	6.9	$(\pm 1.0)$
25-49	1.2	$(\pm 0.5)$
50-74	2.7	$(\pm 0.7)$
75-99	2.7	$(\pm 0.6)$
100	<u>50.2</u>	$(\pm 2.0)$
Total	100.0	

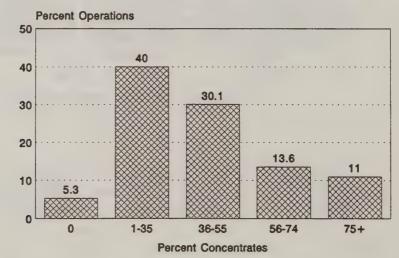
c. Percent of operations that fed the following levels of concentrates (dry matter basis) to cattle upon arrival:

Small (< 1,000 Head) Large (1,000+ Head)

Total

rrival:	Small (< 1.0	000 Head)	Large (1.00	0+ Head)	To	<u>tal</u>
Percent	Percent	Standard	Percent	Standard	Percent	Standard
Concentrates	<b>Operations</b>	Error	<b>Operations</b>	Error	<b>Operations</b>	Error
0	$N/A^2$	$N/A^2$	5.3	$(\pm 0.9)$	$N/A^2$	$N/A^2$
1-35	$N/A^2$	$N/A^2$	40.0	$(\pm 1.9)$	$N/A^2$	$N/A^2$
36-55	$N/A^2$	$N/A^2$	30.1	$(\pm 1.7)$	$N/A^2$	$N/A^2$
56-74	$N/A^2$	$N/A^2$	13.6	$(\pm 1.3)$	$N/A^2$	$N/A^2$
75+	N/A <sup>2</sup>	N/A <sup>2</sup>	_11.0	$(\pm 1.2)$	$N/A^2$	N/A <sup>2</sup>
Total			100.0			

# Percent of Operations of 1,000 Head or More Capacity by Level of Concentrates\* Fed to Cattle on Arrival



\*Dry matter basis.

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- 1 MGA is melengesterol acetate, a heat suppresant for females.
- N/A = data not collected.

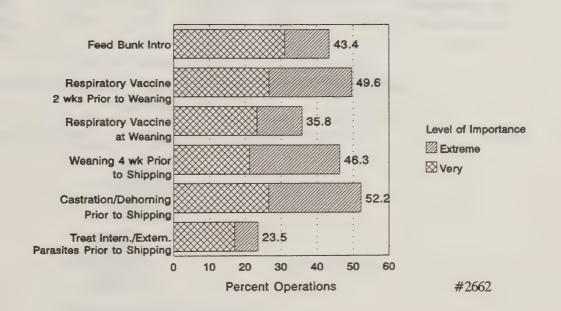
#### 9. Producer Opinions on Pre-Arrival Processing

a. For large operations (1,000 + head), percent of producers by opinion of pre-arrival processing to significantly reduce morbidity and mortality:

Percent of Operations

					refeelt of operations					
	Extremely	Stand.	Very	Stand.	Moderately	y Stand.	Not/Slighth	Stand.	No	Standard
Conditions	Effective	Error	Effective	Error	Effective	Error	Effective	Error	Opinion	Error
Feed bunk introduction Respiratory vaccine at lea		(± 1.3)	31.0	(± 1.7)	16.1	(± 1.3)	1.8	(± 0.5)	38.7	(± 1.9)
2 weeks prior to weaning	g 23.0 (	(± 1.6)	26.6	$(\pm 1.6)$	8.9	$(\pm 0.9)$	1.4	$(\pm 0.4)$	40.1	$(\pm 1.8)$
Respiratory vaccine										
given at weaning	12.5	$(\pm 1.2)$	23.3	$(\pm 1.6)$	16.6	$(\pm 1.4)$	3.7	$(\pm 0.7)$	43.9	$(\pm 1.8)$
Calves weaned at least										
4 weeks prior to shipping	g 25.1 (	$(\pm 1.6)$	21.2	$(\pm 1.5)$	9.4	$(\pm 1.2)$	2.2	$(\pm 0.5)$	42.1	$(\pm 1.8)$
Calves castrated and										
dehorned prior to shippi		$(\pm 1.6)$	26.5	$(\pm 1.6)$	8.1	$(\pm 1.0)$	2.7	$(\pm 0.7)$	37.0	$(\pm 1.8)$
Calves treated for internal or external parasites										
prior to shipping	6.4	$(\pm 0.9)$	17.1	$(\pm 1.4)$	22.6	$(\pm 1.5)$	8.8	$(\pm 1.1)$	45.1	$(\pm 1.9)$

Percent of Operations of 1,000 Head or More Capacity by Producers' Opinions of Importance of Pre-Arrival Processing to Reduce Morbidity & Mortality



#### 10. Health Records Maintained

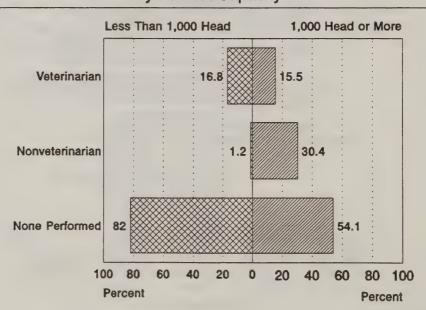
a. For large operations (1,000+ head), frequency of recording the following for sick animals:

		Standard		Standard	Most of	Standard		Standard
Record	Never	Error	Sometim	es Error	the Time	Error	Always	Error
Body temperature	19.0	$(\pm 1.5)$	13.0	$(\pm 1.3)$	13.3	$(\pm 1.3)$	54.7	$(\pm 1.8)$
Date treated	15.0	$(\pm 1.4)$	7.2	$(\pm 1.0)$	6.0	$(\pm 0.9)$	71.8	$(\pm 1.6)$
Weight	56.2	$(\pm 1.7)$	13.2	$(\pm 1.2)$	7.3	$(\pm 0.9)$	23.3	$(\pm 1.4)$
Treatment given	12.8	$(\pm 1.3)$	4.9	$(\pm 0.9)$	4.6	$(\pm 0.8)$	77.7	$(\pm 1.6)$
Treatment withdrawal		, ,						
period	25.2	$(\pm 1.7)$	6.3	$(\pm 0.9)$	5.2	$(\pm 0.9)$	63.3	$(\pm 1.8)$
Disease condition (shipp:	ing							
fever, lameness,								
pneumonia, etc.)	22.0	$(\pm 1.6)$	8.5	$(\pm 1.1)$	7.8	$(\pm 1.0)$	61.7	$(\pm 1.8)$
Outcome (return to								
pen, dead, or culled)	21.8	$(\pm 1.6)$	8.1	$(\pm 1.1)$	7.8	$(\pm 1.0)$	62.3	$(\pm 1.8)$

b. Percent of deaths that had a postmortem examination by:

*	Small (< 1,000 Head)		Large (1.00	00+ Head)	Total	
	Percent	Standard	Percent	Standard	Percent	Standard
Examiner	Deaths	Error	Deaths	Error	Deaths	Error
A veterinarian	16.8	$(\pm 2.8)$	15.5	$(\pm 1.5)$	15.7	$(\pm 1.4)$
A nonveterinarian	1.2	$(\pm 0.6)$	30.4	$(\pm 2.4)$	26.0	$(\pm 2.1)$
No postmortem performed	_82.0	$(\pm 2.9)$	_54.1	$(\pm 2.5)$	58.3	$(\pm 2.2)$
Total	100.0		100.0		100.0	

# Percent of Deaths by Performance of Postmortem Examination by Feedlot Capacity



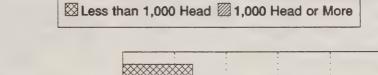
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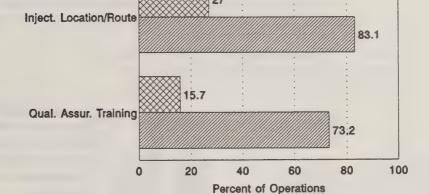
#### 11. Quality Assurance

a. Percent of operations making the following changes in the past 5 years due to concern for quality assurance or food safety: Small (< 1.000 Head) Large (1.000+ Head)

	Percent	Standard	Percent	Standard	Percent	Standard
Program	<b>Operations</b>	Error	<b>Operations</b>	Error	<b>Operations</b>	Error
Location or route of injections	27.0	$(\pm 2.7)$	83.0	$(\pm 1.4)$	29.6	$(\pm 2.7)$
Quality assurance training progr	am 15.7	$(\pm 2.5)$	73.2	$(\pm 1.7)$	18.4	$(\pm 2.4)$

### Changes in Management Practices Due to Concern for Quality Assurance or Food Safety in Feedlots by Feedlot Capacity



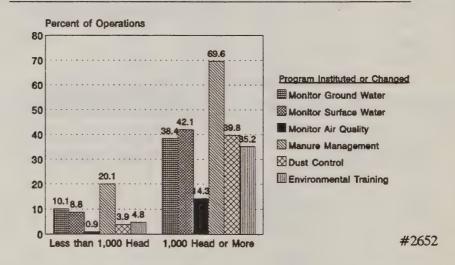


#### 12. Environmental Programs

a. Percent of operations that instituted or changed programs in the past 5 years due to public concern about environmental quality in the following ways:

• •	Small (< 1,000 Head)		Large (1.0	00+ Head)	Total	
	Percent	Standard	Percent	Standard	Percent	Standard
Action	<b>Operations</b>	Error	Operation	s Error	<b>Operations</b>	Error
Instituted a ground water						
monitoring program	10.1	$(\pm 2.4)$	38.4	$(\pm 1.7)$	11.4	$(\pm 2.2)$
Instituted a surface water						
monitoring program	8.8	$(\pm 2.2)$	42.1	$(\pm 1.7)$	10.3	$(\pm 2.1)$
Instituted an air quality						
monitoring program	0.9	$(\pm 0.2)$	14.3	$(\pm 1.0)$	1.6	$(\pm 0.2)$
Changed the manure manageme	nt					
program	20.1	$(\pm 2.6)$	69.6	$(\pm 1.7)$	22.5	$(\pm 2.5)$
Changed the dust control progra	m 3.9	$(\pm 0.9)$	39.8	$(\pm 1.7)$	5.6	$(\pm 0.9)$
Developed a training program of	n					
environmental concerns	4.8	$(\pm 1.1)$	35.2	$(\pm 1.7)$	6.2	$(\pm 1.1)$
		(± 1.1)	35.2	(± 1.7)	6.2	(± 1.1)

Percent of Beef Feedlots that Instituted or Changed Environmental Programs in the Past 5 Years by Feedlot Capacity



#### b. Percent of operations testing:

		Smail (< 1.000 Head)		Large (1,00	0+ Head)	Total	
		Percent	Standard	Percent	Standard	Percent	Standard
		<b>Operations</b>	Error	<b>Operations</b>	Error	<b>Operations</b>	Error
i.	Ground water	10.5	$(\pm 1.5)$	44.9	$(\pm 1.8)$	12.1	$(\pm 1.5)$
ii.	Nutrient content of manure	7.7	$(\pm 2.4)$	38.0	$(\pm 1.7)$	9.1	$(\pm 2.3)$
iii.	Soil						
	i. Of producers disposing manure on their own land, p	ercent		40.4			
	testing nutrient content of so		$(\pm 3.3)$	69.1	(± 1.9)	49.4	$(\pm 3.2)$
	ii. Of producers testing soil percent testing to determine						
	manure application rate	32.5	(± 4.5)	62.4	(± 2.4)	34.2	(± 4.2)

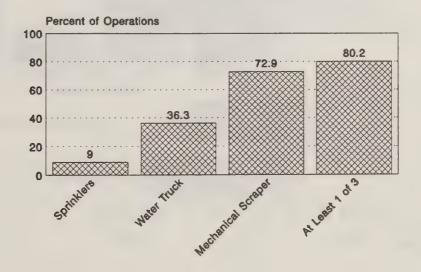
c. Percent of operations using the following methods of waste disposal:

	Small (< 1,000 Head)		Large (1.000+ Head)		Total	
	Percent	Standard	Percent	Standard	Percent	Standard
Method	Operations	Error	<b>Operations</b>	Error	<b>Operations</b>	Error
On own land	99.5	$(\pm 0.2)$	88.0	$(\pm 1.0)$	99.0	$(\pm 0.2)$
Sold	0.0	$(\pm 0.0)$	9.3	$(\pm 1.0)$	0.5	$(\pm 0.1)$
Given away	0.1	$(\pm 0.1)$	23.0	$(\pm 1.3)$	1.2	$(\pm 0.1)$
Pay someone to take it	0.0	$(\pm 0.0)$	6.6	$(\pm 0.7)$	0.3	$(\pm 0.0)$
Other	0.8	$(\pm 0.2)$	4.1	$(\pm 0.6)$	0.9	$(\pm 0.2)$

d. Percent of operations that performed the following dust control practices:

	Small (< 1.000 Head)		Large (1.000+ Head)		Total	
	Percent	Standard	Percent	Standard	Percent	Standard
Practice	<b>Operations</b>	Error	<b>Operations</b>	Error	<b>Operations</b>	Error
Control dust with sprinklers	N/A <sup>1</sup>	N/A <sup>1</sup>	9.0	$(\pm 0.9)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Control dust with water truck	N/A <sup>1</sup>	N/A <sup>1</sup>	36.3	$(\pm 1.5)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Mechanical scraper	N/A <sup>1</sup>	N/A <sup>1</sup>	72.9	$(\pm 1.6)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Any of above	N/A <sup>1</sup>	N/A <sup>1</sup>	80.2	$(\pm 1.5)$	N/A <sup>1</sup>	N/A <sup>1</sup>

# Dust Control Practices on Beef Feedlots of 1,000 Head or More Capacity

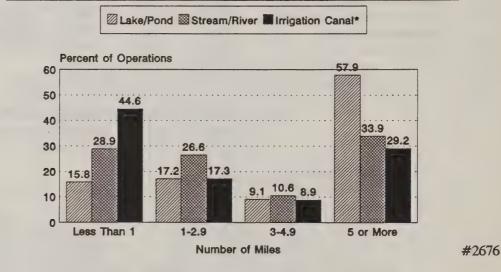


#2611

e. For large operations (1,000+ head), percent of operations by distance from the feedlot to nearest open water:

	Percent of Operations							
	Less T	han 1 Mile	1-2.9 Miles		3-4.9 Miles		5+ Miles	
		Standard		Standard		Standard		Standard
Water Source	Percent	Error	Percent	Error	Percent	Error	Percent	Error
Lake or pond (not lagoon)	15.8	$(\pm 1.5)$	17.2	$(\pm 1.5)$	9.1	$(\pm 1.1)$	57.9	$(\pm 1.9)$
Stream or river	28.9	$(\pm 1.7)$	26.6	$(\pm 1.7)$	10.6	$(\pm 1.2)$	33.9	$(\pm 1.6)$
Irrigation canal <sup>1</sup>	44.6	$(\pm 3.3)$	17.3	$(\pm 2.5)$	8.9	$(\pm 2.2)$	29.2	$(\pm 2.9)$

### Distance to Nearest Open Water Feedlot Operations of 1,000 Head or More Capacity



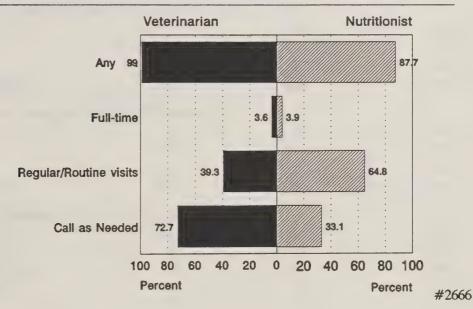
Data collected only in irrigated regions, as determined by producers.

#### 13. Use of Veterinarian and Nutritionist

a. Percent of operations that used the following consultants during the year ending June 30, 1994:

	Small (< 1.00	0 Head)	Large (1.00	0+ Head)	To	tal
	Percent	Standard	Percent	Standard	Percent	Standard
<u>Use</u>	<b>Operations</b>	Error	<b>Operations</b>	Error	<b>Operations</b>	Error
Veterinarian, any	N/A <sup>1</sup>	N/A <sup>1</sup>	99.0	$(\pm 0.3)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Veterinarian, full-time	N/A <sup>1</sup>	N/A <sup>1</sup>	3.6	$(\pm 0.6)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Veterinarian, regular or routine				, ,		
visits	N/A <sup>1</sup>	N/A <sup>1</sup>	39.3	$(\pm 1.6)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Veterinarian, call as needed	N/A <sup>1</sup>	N/A <sup>1</sup>	72.7	$(\pm 1.4)$	N/A <sup>1</sup>	N/A <sup>1</sup>
Nutritionist, any	N/A <sup>1</sup>	N/A <sup>1</sup>	87.7	(+ 12)	N/A <sup>1</sup>	N/A <sup>1</sup>
Nutritionist, full-time	N/A <sup>1</sup>	N/A <sup>1</sup>	3.9	(± 1.3)	N/A <sup>1</sup>	N/A <sup>1</sup>
Nutritionist, regular or routine	IN/A	IN/A	3.9	$(\pm 0.6)$	N/A	N/A
visits	N/A <sup>1</sup>	N/A <sup>1</sup>	64.8	(± 1.7)	N/A <sup>1</sup>	N/A <sup>1</sup>
Nutritionist, call as needed	N/A <sup>1</sup>	N/A <sup>1</sup>	33.1	$(\pm 1.7)$ $(\pm 1.8)$	N/A <sup>1</sup>	N/A <sup>1</sup>

# Use of Veterinarians and Nutritionists on Feedlots of 1,000 Head or More Capacity



#### 14. Carcass Disposal Methods

a. Percent of operations (and percent of dead animals) by disposal method of dead animals in year ending June 30, 1994:

i.	Operations	Small (< 1.0	00 Head) Standard	Large (1.00 Percent	0+ Head) Standard	To Percent	tal Standard
	Disposal	Operations		Operations		Operations	Error
	Buried on farm	19.4	$(\pm 5.8)$	11.8	$(\pm 1.0)$	18.5	$(\pm 5.1)$
	Landfill	0.8	$(\pm 0.5)$	1.2	$(\pm 0.4)$	0.8	$(\pm 0.4)$
	Renderer	80.8	$(\pm 5.8)$	94.3	$(\pm 0.7)$	82.4	$(\pm 5.2)$
	Other	1.4	$(\pm 0.6)$	1.0	$(\pm 0.4)$	1.3	$(\pm 0.5)$
ii.	Dead animals	Small (< 1.0	00 Head) Standard	Large (1.00	0+ Head) Standard	To	tal Standard
	Disposal	<u>Operations</u>		Operations Operations		Percent Operations	Error
	Buried on farm	12.5	$(\pm 3.8)$	3.5	$(\pm 0.8)$	4.4	$(\pm 0.7)$
	Landfill	0.4	$(\pm 0.2)$	0.7	$(\pm 0.5)$	0.7	$(\pm 0.3)$
	Landin	0.4	(= 0.2)	0.7	(± 0.5)	0.7	(= 0.5)
	Renderer	86.2	$(\pm 3.8)$	95.8	$(\pm 0.9)$	94.8	$(\pm 0.8)$

## **Section II: Sample Profile**

1. Descriptive Statistics of Responding Operations

	Small (< 1,000 Head) Number of Operations	Large (1,000+ Head) Number of Operations	Total Number of Operations
a. Number of respondents:	-	498	1,411
b. Number of operations th	nat placed any dairy:		
Yes	164	159	323
No	743	329	1,072
N/A <sup>1</sup>	<u>_6</u>	_10	16
Total	913	498	1,411
c. Number of operations th	at placed both beef and	d dairy:	
Yes	84	152	236
No	823	336	1,159
N/A <sup>1</sup>	<u>_6</u>	10	16
Total	913	498	1,411
d. Number of operations th	nat placed cows or bulls	•	
Yes	5	48	53
No	903	440	1,343
N/A <sup>1</sup>	_5	<u>10</u>	15
Total	913	498	1,411
e. Number of operations th	nat placed Mexican catt	ile:	
Yes	4	81	85
No	909	417	1,326
N/A <sup>1</sup>	_0	_0	0
Total	913	498	1,411
f. Number of operations by	number of placements	:	
1-2,499	908	161	1,069
2,500-9,999	4	143	147
10,000-39,999	0	118	118
40,000+	0	76	76
N/A <sup>1</sup>	_1	_0	_1
Total	913	498	1,411



### **Materials Available from NAHMS**

### Discussions and graphic presentations of the COFE results:

- January 1995, Topics include Feedlot Quality Assurance, Environmental Monitoring by Feedlots, and Mexican-Origin Cattle in Feedlots.
- Spring 1995, Topics include Injection Sites, Vaccination Practices, and Information Sources.

### Tabular summary of COFE results with graphic presentations:

• Spring 1995, Part II: Feedlot Health Management Report

### Centers for Epidemiology and Animal Health (CEAH)

USDA:APHIS:VS, Attn. NAHMS 555 South Howes, Suite 200 Fort Collins, Colorado 80521 (303) 490-7800

Electronic mail: NAHMS-INFO@aphis.usda.gov

Selected informational materials available from CEAH are listed below. Please enter the number of copies of each document requested and fill in your name and address. Allow 3-4 weeks for delivery.

Continued on other side...

Name:	Componed Dusiness	For office use only:
Street:	Company/Business:	Date Received/Initial:
City, State, Z	in·	
Telephone:	ap.	Date Mailed/Initial/Method:
Cattle on I	Feed Evaluation (COFE), 1994-1995	NAHMS
	tle Death Loss in Small Feedlots, 5/94 (fact sheet includes relative proportion of losse iratory, digestive, and other problems)	es attributed to
	t Sheets, 1/95 (discussions and graphic presentations of the COFE results) Topics inditoring, Mexican-origin cattle, and quality assurance.	clude: environmental
plac	t I: Feedlot Management Practices, 1/95 (24-page tabular summary with graphic presement disposition, sources, and processing; branding and identification; pen riding or vagement; preconditioning, record keeping; quality assurance; environmental programs	walking protocols; nutritional
Cow/Calf	Health & Productivity Audit (CHAPA), 1993-1994	NAHMS
	t I: Beef Cow/Calf Herd Practices in the United States, 8/93 (24-page tabular summentations of data collected on health, productivity, and management practices from productivity.	nary with graphic
Par	t II: Beef Cow/Calf Reproductive & Nutritional Management Practices/ t III: Beef Cow/Calf Health & Health Management, 1/94 (46-page tabular summary entations)	of CHAPA results with graphic
	t IV: Beef Cow/Calf Breeding Management, 3/94 (12-page tabular summary of CHA entations)	PA results with graphic
Par	t V: Quality Assurance Profile, 8/94 (fifth tabular summary of CHAPA results with g	raphic presentations.)
<b>4</b> C	t Sheets, 8/93-3/94 (discussions and graphic presentations of the CHAPA results) To Cryptosporidium/Giardia, animal identification, branding practices, injection sites, ing management, use of reproductive management technology, weak calf syndrome	opportunities to improve
Swine '95:	Grower/Finisher, 1995	MAHMS
Pro	ducer brochure*, 1/95 (1-page description of the study and benefits to the pork industr	y)
USI	OA Identifies Pork Industry's Information Gaps, 12/94 (fact sheet describing results	of needs assessment activities)
National S	Swine Survey, 1989-1990	NABINS
Moi sum	rbidity/Mortality and Health Management of Swine in the United States, 11/91 (40 mary of the data collected during the swine project) & Water quality.	-page tabular
Ton	t Sheets, 11/91 (discussions and graphic presentations of the results of the swine projectics covered: biosecurity measures, preweaning morbidity & mortality, sow product owing facilities, preventive practices, consultants, and *water quality.	ct) ivity, total confinement and
Swin	ne Slaughter Surveillance Program, 5/92 (fact sheet presenting results of slaughter c nesota/NAHMS feasibility study)	hecks from a

\* Food Safety Issues (items addressing, or contain topics regarding to, food safety)

\*Allow 6-8 weeks for delivery.

mergi	ing Issues
	* Executive Summary, E. coli 0157:H7 - Issues and Ramifications, 3/94 (11-page document summarizes an 80-page report focusing on the role of cattle as a source of E. coli 0157:H7 in food products: what is known about 015 in cattle and the production of ground beef, and discusses directions for the future management of 0157)
	Check here to receive the larger report.
	Assessment of Risk Factors for Mycobacterium bovis in the United States, 11/92 (150-page report)
	USDA Study Identifies Disease of Potential Concern for U.S. Cattle (fact sheet on bovine viral diarrhea [BVD] type 2)
Ï	Bovine Spongiform Encephalopathy (BSE) Risk Assessment
	Bovine Spongiform Encephalopathy: Implications for the United States, 12/93 (25-page report containing updates on BSE in Great Britain, risk factors and surveillance in the U.S., and a quantitative assessment of the possible role of nonambulatory cattle in transmissible spongiform encephalopathy in the U.S.)
	Quantitative Risk Assessment of BSE in the United States (15-page report)  Qualitative Analysis of BSE Risk Factors in the United States (25-page report)
	United States Rendering and Feed-Manufacturing Industries: Evaluation of Practices with Risk Potential for Bovine Spongiform Encephalopathy, 11/92 (22-page report)
	BSE Video, 7/92 (video contains four segments: two short videos of dairy cows showing clinical signs; a BBC television show, "Horizon;" and a film developed by the British Ministry of Agriculture. For check-out only.)
	DxMonitor Animal Health Report (trends of confirmed disease diagnoses and animal health data collected from veterinary diagnostic laboratories)   Food safety topics may be presented in individual issues.
	I would like to receive a copy of the <b>DxMonitor</b> . (Note: After reviewing the DxMonitor, you may request to receive this report on a quarterly basis.)
	Introduction to the Veterinary Diagnostic Laboratory Reporting System, 10/92 (informational brochure about the VDLRS)
	Report of the 1991 DxMonitor Committee Meeting, 8/92 (report of a 1991 meeting of industry representatives convened to provide oversight and direct input for the growth and development of the VDLRS)
ation	al Dairy Heifer Evaluation Project (NDHEP), 1991-1992
	Dairy Herd Management Practices Focusing on Preweaned Heifers, 7/93 (36-page tabular summary of data on preweaned heifer management collected during the NDHEP)
	Dairy Heifer Morbidity, Mortality, and Health Management Focusing on Preweaned Heifers, 2/94 (part II of the NDHEP results is a 22-page tabular summary with selected graphic presentations of data collected)
	Fact Sheets, 7/93-2/94 (discussions and graphic presentations of the NDHEP results) Topics include: colostrum management, record keeping & information sources, calf feeds & weaning practices, housing, contract heifer raising, biosecurity measures, maternity hygiene, vaccination practices, nutritional supplements & feed additives, transfer of maternal immunity to calves, * Cryptosporidium, * Escherichia coli 0157:H7, * Salmonella, blood selenium levels and growth of dairy heifers.
	* Bulk Tank Milk Somatic Cell Counts and Your Milk Quality Assurance Program, 1/94 (fact sheet presenting an assessment of associations between somatic cell count and completion of the Milk and Dairy Beef Quality Assurance Program [MDBQAP])
rgani	zational Information
	* Bibliography (list of published technical articles from CAHM/CEI, 1983 - present)
	NAHMS Management Review Group Report (report of a 1992 meeting of USDA representatives convened to provide oversight and direct input for the growth and development of the NAHMS program)



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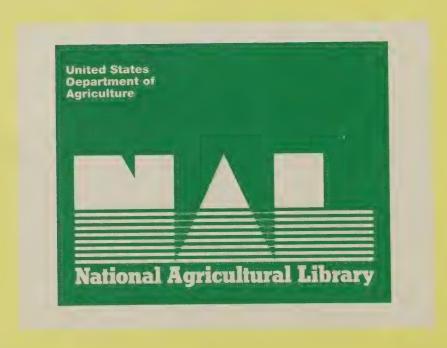
#### Acknowledgements

This report has been prepared from material received and analyzed by the U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS).

The Cattle on Feed Evaluation was a cooperative effort between State and Federal agricultural statisticians, animal health officials, university researchers, and extension personnel. We want to thank the National Agricultural Statistics Service (NASS) enumerators and State and Federal Veterinary Medical Officers (VMO's) who visited the farms and collected the data for their hard work and dedication to the National Animal Health Monitoring System (NAHMS).

The roles of the producer, Area Veterinarian in Charge (AVIC), NAHMS Coordinator, Veterinary Medical Officer (VMO), Animal Health Technician (AHT), and NASS enumerators were critical in providing quality data for this report. All participants are to be commended for their efforts, particularly the producers whose voluntary efforts made the study possible.

Dr. Al Strating, Director Centers for Epidemiology & Animal Health



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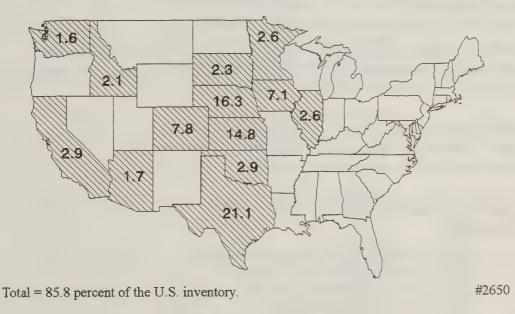
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#### Introduction

As part of the National Animal Health Monitoring System (NAHMS), the USDA: APHIS: Veterinary Services (VS) conducted a National feedlot study designed to provide both participants and the industry with information on feedlot animal health, productivity, and management practices.

The USDA's National Agricultural Statistics Service (NASS) collaborated with VS to select a producer sample (3,214 feedlots) that was statistically **designed to provide inferences to the nation's feedlot animal population**. Included in the study were 13 major cattle-on-feed States that accounted for 85.8 percent of the U.S. cattle-on-feed inventory as of January 1, 1994 (shown below).

States Participating in the NAHMS Cattle on Feed Evaluation and Percent of U.S. Cattle-on-Feed Inventory, January 1, 1994



This report is the second of a two-part release of National information resulting from the NAHMS Cattle on Feed Evaluation (COFE):

- Part I: Feedlot Management Practices was released in January 1995. NASS interviewers contacted a total of 3,214 producers by telephone or personal interview from August 1 through September 16, 1994, to collect data for Part I.
- Part II: Feedlot Health Management Report contains health management data collected from August through September by telephone interview from producers with feedlots of less than 1,000-head capacity. State and Federal Veterinary Medical Officers collected the data from feedlots of 1,000 head or more capacity through personal interviews from October 3 through December 21, 1994.

For both reports, percent of cattle placed refers to cattle placed on feed from July 1, 1993, through June 30, 1994.

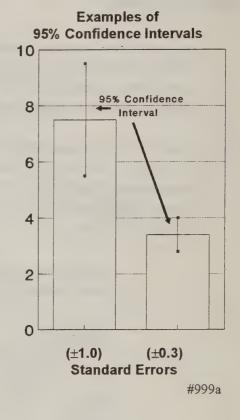
Descriptive tables in Section I of this report are population estimates, such as means and proportions which have been **weighted to represent the population** (85.8 percent of the U.S. cattle-on-feed inventory). Section II describes the participating operations whose managers provided the data from which National estimates were derived.

The estimates are provided with a measure of variability called the standard error, denoted by  $(\pm)$ . Chances are 95 out of 100 that the interval created by the estimate plus or minus two standard errors will contain the true population value. In the example at right, an estimate of 7.5 percent with a standard error of  $\pm 1.0$  results in a range of 5.5 to 9.5 (two times the standard error above and below the estimate).

Identification numbers have been assigned to each graph in this report for reference purposes (notice the #999a notation below the graph at right).

If you have questions about this report, contact NAHMS at:

Centers for Epidemiology and Animal Health
USDA:APHIS:VS, Attn. NAHMS
555 South Howes, Suite 200
Fort Collins, CO 80521
(970) 490-7800
Internet: NAHMS\_INFO@aphis.usda.gov



### I. Population Estimates

#### A. Antibiotics in Feed and Water

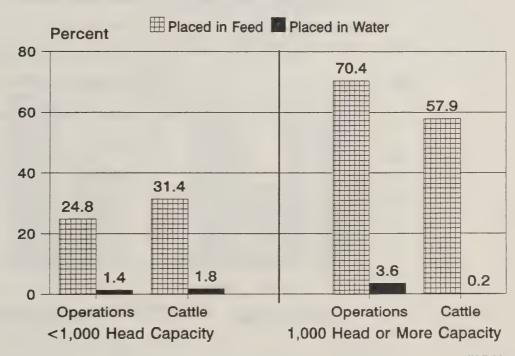
1. Of all operations, percent of operations that used an antibiotic as a health or production management tool:

	Small (<1,000 Head)		Large (1,000+ Head)		<u>Total</u>	
	Percent	Standard	Percent	Standard	Percent	Standard
Method of Delivery	<u>Operations</u>	Ептог	<b>Operations</b>	Ептог	<b>Operations</b>	Епог
Placed in feed	24.8	(±2.9)	70.4	(±1.8)	27.0	(±2.8)
Placed in water	1.4	$(\pm 0.3)$	3.6	$(\pm 0.7)$	1.5	$(\pm 0.3)$

2. Of all cattle placed on feed, percent of cattle given an antibiotic as a health or production management tool:

	Small (<1,000 Head)		Large (1,000+ Head)		<u>Total</u>	
	Percent	Standard	Percent	Standard	Percent	Standard
Method of Delivery	Cattle	Error	Cattle	Епог	Cattle	Error
Placed in feed	31.4	(±3.0)	57.9	$(\pm 2.0)$	54.7	(±1.8)
Placed in water	1.8	$(\pm 0.4)$	0.2	$(\pm 0.1)$	0.4	$(\pm 0.1)$

Percent of Operations Giving (and Percent of Cattle Given) an Antibiotic in Feed and Water as a Health or Production Management Tool

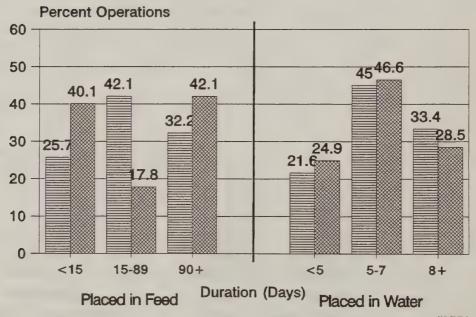


3. For operations that used antibiotics as a health or production management tool, percent of operations by duration (days):

a.	Placed in feed	Small (<1,0	00 Head)	Large (1.0	00+ Head)	Tot	tal
		Percent	Standard	Percent	Standard.	Percent	Standard
	Duration (Days)	<u>Operations</u>	Error	<u>Operations</u>	Error	Operations	Error
	<15	25.7	(±5.3)	40.1	(±2.3)	27.6	$(\pm 4.6)$
	15-89	42.1	$(\pm 7.1)$	17.8	$(\pm 1.9)$	38.8	$(\pm 6.1)$
	90 +	32.2	(±8.0)	42.1	$(\pm 2.2)$	33.6	(±6.9)
	Total	100.0		100.0		100.0	
b.	Placed in water	Small (<1,00	00 Head)	Large (1.0	00+ Head)	Tot	al
		Percent	Standard	Percent	Standard	Percent	Standard
	Duration (Days)	<u>Operations</u>	Error	<u>Operations</u>	Error	Operations	Error
	<5	21.6	(±9.0)	24.9	(±9.1)	22.0	$(\pm 7.9)$
	5-7	45.0	(±11.6)	46.6	$(\pm 10.5)$	45.2	$(\pm 10.2)$
	8+	33.4	(±10.9)	28.5	$(\pm 9.6)$	32.8	(±9.6)
	Total	100.0		100.0		100.0	

### Percent of Operations Using Antibiotics as a Health or Production Management Tool by Duration

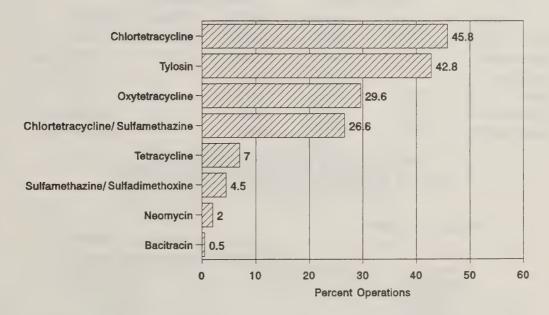




4. For large operations (1,000 head or more capacity), percent of operations by type of antibiotic used in feed or water as a health or production management tool:

Type of Antibiotics	Percent Operations	Standard Error
Bacitracin	0.5	(±0.2)
Chlortetracycline	45.8	(±2.3)
Chlortetracycline/		
Sulfamethazine	26.6	(±2.1)
Neomycin	2.0	(±0.7)
Oxytetracycline	29.6	(±2.2)
Sulfamethazine/		
Sulfadimethoxine	4.5	$(\pm 1.0)$
Tetracycline	7.0	(±1.3)
Tylosin	42.8	$(\pm 2.1)$
Other	1.0	(±0.4)

# Percent of Operations\* by Type of Antibiotic Used for Health or Production Management



<sup>\*</sup>Percent of operations with 1,000 head or more capacity.

#### B. Antibiotic Injections - Long-lasting

1. Of all cattle placed on feed, percent of cattle given a long-lasting (label specifies effect greater than 24 hours) antibiotic between arrival and exiting the feedlot:

Small (<1.0	000 Head)	Large (1.0	00+ Head)	To	<u>otal</u>
Percent	Standard	Percent	Standard	Percent	Standard
Cattle	Error	Cattle	Error	Cattle	Error
16.4	(±1.9)	13.1	$(\pm 0.9)$	13.5	(±0.8)

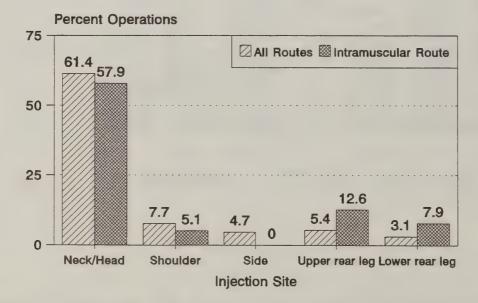
2. For large operations (1,000 head or more capacity) giving long-lasting antibiotics, percent of operations by route antibiotic was given:

Route	Percent Operations	Standard Error
Intramuscular	62.8	(±2.1)
Subcutaneous	54.4	(±2.1)
Intravenous	8.7	(±1.1)
Other	0.0	$(\pm 0.0)$

3. For large operations (1,000 head or more capacity) giving long-lasting antibiotics, percent of operations giving all long-lasting antibiotic injections in one site by site:

Percent Operations			
All	Standard	Intramuscular	Standard
Routes	Error	Route	Error
61.4	$(\pm 2.0)$	57.9	$(\pm 2.6)$
7.7	$(\pm 1.1)$	5.1	$(\pm 1.1)$
4.7	$(\pm 1.0)$	0.0	$(\pm 0.0)$
5.4	$(\pm 1.0)$	12.6	$(\pm 1.8)$
3.1	$(\pm 0.7)$	7.9	$(\pm 1.3)$
	Routes 61.4 7.7 4.7 5.4	All Standard  Routes Error  61.4 (±2.0)  7.7 (±1.1)  4.7 (±1.0)  5.4 (±1.0)	Routes         Error         Route           61.4         (±2.0)         57.9           7.7         (±1.1)         5.1           4.7         (±1.0)         0.0           5.4         (±1.0)         12.6

# Percent of Operations\* Giving All Long-Lasting Antibiotics In One Site



<sup>\*</sup>Percent of operations with 1,000 head or more capacity giving long-lasting antibiotics.

#### C. Antibiotic Injections - Regular

1. Of all cattle placed on feed, percent of cattle given a regular antibiotic (label specifies effect 24 hours or less) between arrival and exiting the feedlot:

Small (<1,	000 Head)	Large (1.0	000+ Head)	To	<u>otal</u>
Percent	Standard	Percent	Standard	Percent	Standard
Cattle	Error	Cattle	Error	Cattle	Error
10.0	(±1.5)	16.1	(±1.0)	15.4	(±0.9)

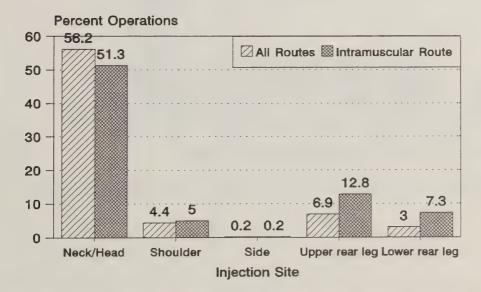
2. For large operations (1,000 head or more capacity) giving regular antibiotics, percent of operations by route antibiotic was given:

Route	Percent Operations	Standard Error
Intramuscular	84.3	(±1.6)
Subcutaneous	26.4	(±1.9)
Intravenous	29.1	(±1.9)
Other	0.4	(±0.2)

3. For large operations (1,000 head or more capacity) giving regular antibiotics, percent of operations giving all regular antibiotic injections in one site by site:

Site	All Routes	Standard Error	Intramuscular Route	Standard Error
Neck/Head	56.2	$(\pm 2.1)$	51.3	$(\pm 2.4)$
Shoulder	4.4	$(\pm 0.9)$	5.0	$(\pm 1.1)$
Side	0.2	$(\pm 0.1)$	0.2	$(\pm 0.2)$
Upper rear leg	6.9	(±1.1)	12.8	(±1.6)
Lower rear leg	3.0	$(\pm 0.7)$	7.3	$(\pm 1.2)$

# Percent of Operations\* Giving All Regular Antibiotics in One Site



<sup>\*</sup>Percent of operations with 1,000 head or more capacity giving regular antibiotics.

#### D. Vitamin Injections

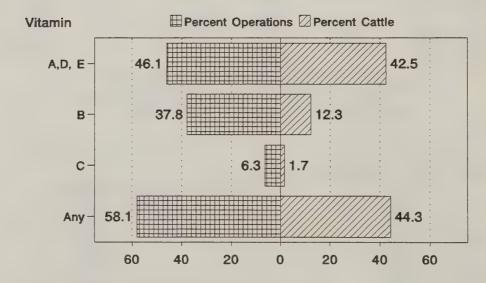
1. For large operations (1,000 head or more capacity), percent of operations giving vitamin injections:

<u>Vitamins</u>	Percent Operations	Standard Error
A, D, E	46.1	(±1.9)
В	37.8	(±1.9)
С	6.3	(±0.9)
Any	58.1	(±2.0)

2. Of all cattle placed on feed in large operations (1,000 head or more capacity), percent of cattle given vitamin injections:

Vitamins	Percent Operations	Standard Error
A, D, E	42.5	(±2.6)
В	12.3	(±1.6)
С	1.7	(±0.5)
Any	44.3	(±2.5)

### Percent of Operations\* Giving (and Percent of Cattle Given) Vitamin Injections



Percent of operations with 1,000 head or more capacity.

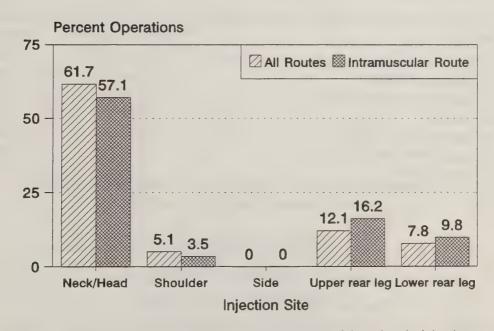
3. For large operations (1,000 head or more capacity) where vitamin injections were given, percent of operations by route the vitamin injection was given:

Route	Percent Operations	Standard Error
Intramuscular	76.8	(±2.2)
Subcutaneous	29.1	$(\pm 2.4)$
Intravenous	4.2	(±1.1)
Other	0.3	(±0.1)

4. For large operations (1,000 head or more capacity) giving vitamin injections, percent of operations giving all vitamin injections in one site by site: Percent Operations

Site	All Routes	Standard Error	Intramuscular Route	Standard Error
Neck/Head	61.7	$(\pm 2.4)$	57.1	$(\pm 2.8)$
Shoulder	5.1	(±1.1)	3.5	$(\pm 1.1)$
Side	0.0	$(\pm 0.0)$	0.0	$(\pm 0.0)$
Upper rear leg	12.1	$(\pm 1.7)$	16.2	$(\pm 2.1)$
Lower rear leg	7.8	$(\pm 1.4)$	9.8	$(\pm 1.7)$

# Percent of Operations\* Giving All Vitamin Injections in One Site



<sup>\*</sup>Percent of operations with 1,000 head or more capacity giving vitamin injections.

#### E. Clostridial Vaccinations

1. For all operations, percent of operations giving any clostridial vaccinations:

Small (<1,000 Head) L		Large (1.00	00+ Head)	<u>Total</u>		
Percent	Standard	Percent	Standard	Percent	Standard	
<u>Operations</u>	Error	<u>Operations</u>	Error	Operations	Ептог	
34.4	(±3.1)	91.0	$(\pm 1.2)$	37.1	$(\pm 3.0)$	

2. For all cattle placed on feed, percent of cattle given any clostridial vaccinations:

Small (<1,000 Head)		Large (1.0	000+ Head)	<u>Total</u>		
Percent	Standard	Percent	Standard	Percent	Standard	
<u>Cattle</u>	Error	Cattle	Error	Cattle	Error	
44.6	(±3.4)	92.0	(±1.2)	86.5	(±1.1)	

3. For large operations (1,000 head or more capacity), percent of operations giving the following clostridial vaccinations:

Percent Operations Standard Error

cemanons.	Tercent Operations	Standard Error
Cl. perfringens C and D (enterotoxemia, overeating)	89.7	(±1.2)
Cl. chauvoei (blackleg)	88.6	$(\pm 1.3)$
Cl. septicum (malignant edema)	87.5	(±1.3)
Cl. sordellii	86.0	(±1.4)
Cl. hemolyticum (redwater)	35.2	(±1.9)
Cl. novyi (black disease)	86.0	(±1.4)
Cl. tetani (tetanus)	16.7	$(\pm 1.3)$

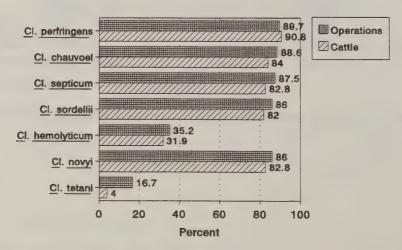
4. For large operations (1,000 head or more capacity), percent of cattle given the following clostridial vaccinations:

Percent Cattle

Standard Error

cemanons.	T CICCIII Cattic	Standard Live
Cl. perfringens C and D (enterotoxemia, overeating)	90.8	(±1.2)
Cl. chauvoei (blackleg)	84.0	(±1.7)
Cl. septicum (malignant edema)	82.8	(±1.7)
Cl. sordellii	82.0	(±1.8)
Cl. hemolyticum (redwater)	31.9	(±2.3)
Cl. novvi (black disease)	82.8	(±1.7)
Cl. tetani (tetanus)	4.0	$(\pm 0.5)$

Percent of Operations\* Giving (and Percent of Cattle Given) the Following Clostridial Vaccinations



\*Percent of operations with 1,000 head or more capacity.

5. For operations where clostridial vaccinations were given, percent of operations by route the clostridial vaccination was given:

Small (<1,000 Head)

Large (1,000+ Head)

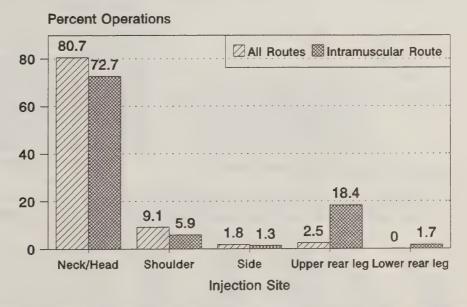
Total

accination was given:	Small (<1,00	<1,000 Head) Large (1,000+ Head)		<u>Total</u>		
	Percent	Standard	Percent	Standard	Percent	Standard
Route	<u>Operations</u>	Error	Operations	Error -	Operations	Error
Intramuscular	41.8	(±5.9)	13.8	$(\pm 1.5)$	38.0	$(\pm 5.0)$
Subcutaneous	67.3	$(\pm 5.2)$	87.5	$(\pm 1.4)$	70.0	$(\pm 4.4)$
Intravenous	0.0	$(\pm 0.0)$	0.0	$(\pm 0.0)$	0.0	$(\pm 0.0)$
Other	0.0	$(\pm 0.0)$	0.0	$(\pm 0.0)$	0.0	$(\pm 0.0)$

6. For large operations (1,000 head or more capacity) where clostridial vaccinations were given, percent of operations giving all clostridial vaccinations in one site by site:

Percent Operations						
All	Standard	Intramuscular	Standard			
Routes	Error	Route	Error			
80.7	(±1.7)	72.7	(±5.3)			
9.1	$(\pm 1.2)$	5.9	$(\pm 2.8)$			
1.8	$(\pm 0.5)$	1.3	$(\pm 0.9)$			
2.5	$(\pm 0.7)$	18.4	$(\pm 4.6)$			
0.0	$(\pm 0.0)$	1.7	$(\pm 1.4)$			
	80.7 9.1 1.8 2.5	All Standard  Routes Error  80.7 (±1.7)  9.1 (±1.2)  1.8 (±0.5)  2.5 (±0.7)	All Routes         Standard Error         Intramuscular Route           80.7         (±1.7)         72.7           9.1         (±1.2)         5.9           1.8         (±0.5)         1.3           2.5         (±0.7)         18.4			

# Percent of Operations\* Giving All Clostridial Vaccinations in One Site



\*Percent of operations with 1,000 head or more capacity giving clostridial vaccinations. #2779

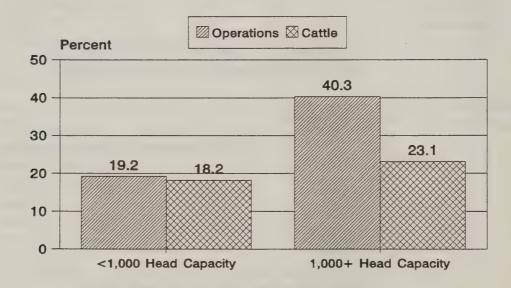
7. For operations where clostridial vaccinations were given, percent of operations giving more than one clostridial vaccine injection (at the same time or different times):

Small (<1	000 Head	) Large (1.0	000+ Head	<u>Tota</u>	<u>a 1</u>
Percent	Standard	Percent	Standard	Percent	Standard
<u>Operations</u>	Error	<b>Operations</b>	Error	<b>Operations</b>	Error
19.2	(±3.7)	40.3	$(\pm 2.0)$	21.7	(±3.3)

8. For operations where clostridial vaccinations were given, percent of cattle given more than one clostridial vaccine injection (at the same time or different times):

Small (<)	,000 Head)	Large (1.	000+ Head)	Tot	tal
Percent	Standard	Percent	Standard	Percent	Standard
Cattle	Error	Cattle	Error	Cattle	Error
18.2	(±2.9)	23.1	(±1.6)	22.8	(±1.5)

### Percent of Operations\* Giving (and Percent of Cattle Given) More Than One Clostridial Vaccine Injection\*\*



<sup>\*</sup>For operations where clostridial vaccinations were given.

<sup>\*\*</sup>Multiple injections could have been given at the same time or at different times.

#### F. Nonclostridial Vaccinations

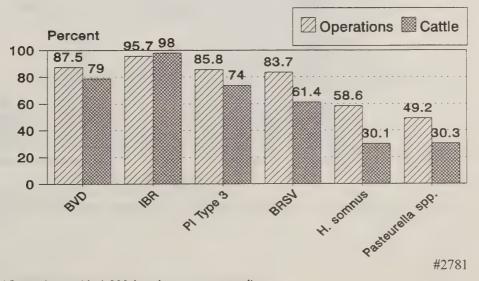
1. Of all operations, percent of operations giving the following vaccinations<sup>1</sup>:

	Small (<1,000 Head)		Large (1,000+ Head)		<u>Total</u>	
	Percent	Standard	Percent	Standard	Percent	Standard
<u>Vaccination</u>	<u>Operations</u>	Error	<u>Operations</u>	Error	Operations	Error
Bovine viral diarrhea (BVD)	43.7	$(\pm 3.4)$	87.5	$(\pm 1.3)$	45.7	$(\pm 3.2)$
Infectious bovine rhino-						
tracheitis (IBR)	46.2	$(\pm 3.4)$	95.7	$(\pm 0.9)$	48.6	$(\pm 3.2)$
Parainfluenza Type 3 (PI3)	36.3	$(\pm 3.4)$	85.8	$(\pm 1.3)$	38.7	$(\pm 3.2)$
Bovine Respiratory Syncytial						
Virus (BRSV)	33.5	$(\pm 3.4)$	83.7	$(\pm 1.4)$	35.9	$(\pm 3.2)$
Hemophilus somnus	28.6	$(\pm 3.4)$	58.6	$(\pm 2.0)$	30.1	$(\pm 3.2)$
Pasteurella spp.	28.4	$(\pm 3.3)$	49.2	$(\pm 2.0)$	29.4	$(\pm 3.2)$

2. Of all cattle placed on feed, percent of cattle given the following vaccinations<sup>1</sup>:

	Small (<1,000 Head)		Large (1.000+ Head)		<u>Total</u>	
	Percent	Standard	Percent	Standard	Percent	Standard
Vaccination	Cattle	Error	Cattle	Error	Cattle	Error
Bovine viral diarrhea (BVD)	61.5	(±3.1)	79.0	$(\pm 1.7)$	76.9	$(\pm 1.6)$
Infectious bovine rhino-						
tracheitis (IBR)	65.7	$(\pm 3.0)$	98.0	$(\pm 0.4)$	94.1	$(\pm 0.5)$
Parainfluenza Type 3 (PI3)	51.5	(±3.1)	74.0	$(\pm 2.2)$	71.3	$(\pm 2.0)$
Bovine Respiratory Syncytial						
Virus (BRSV)	46.2	$(\pm 3.2)$	61.4	$(\pm 2.1)$	59.6	$(\pm 1.9)$
Hemophilus somnus	39.3	(±3.3)	30.1	(±1.9)	31.2	$(\pm 1.7)$
Pasteurella spp.	36.4	(±3.1)	30.3	$(\pm 2.0)$	31.1	$(\pm 1.8)$

### Percent of Operations\* Giving (and Percent of Cattle Given) the Following Vaccinations



<sup>\*</sup>Operations with 1,000 head or more capacity.

I Injection or nasal spray.

3. For large operations (1,000 head or more capacity) where nonclostridial vaccinations were given at processing, percent of operations by route the vaccination was given:

Route	Percent Operations	Standard Error
Intramuscular	81.0	(±1.7)
Subcutaneous	31.6	(±2.0)
Intravenous	0.0	(±0.0)
Other	61	$(\pm 1.0)$

4. For large operations (1,000 head or more capacity), percent of cattle given any nonclostridial vaccinations:

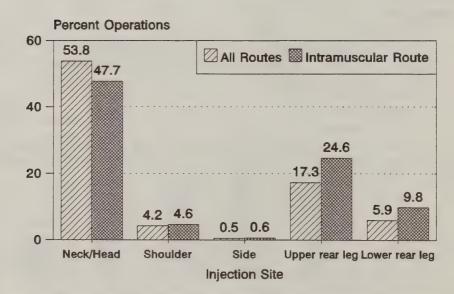
Percent Cattle

98.6 (±0.3)

5. For large operations (1,000 head or more capacity) where nonclostridial vaccinations were given, percent of operations giving all nonclostridial vaccinations in one site by site:

Percent Operations					
All	Standard	Intramuscular	Standard		
Routes	Error	Route	Error		
53.8	(±2.0)	47.7	$(\pm 2.2)$		
4.2	(±0.8)	4.6	$(\pm 0.9)$		
0.5	(±0.3)	0.6	$(\pm 0.4)$		
17.3	(±1.6)	24.6	(±2.0)		
5.9	(±0.9)	9.8	$(\pm 1.3)$		
	Soutes 53.8 4.2 0.5 17.3	All Standard  Routes Error  53.8 (±2.0) 4.2 (±0.8) 0.5 (±0.3) 17.3 (±1.6)	All Routes         Standard Error         Intramuscular Route           53.8         (±2.0)         47.7           4.2         (±0.8)         4.6           0.5         (±0.3)         0.6           17.3         (±1.6)         24.6		

### Percent of Operations\* Giving All Nonclostridial Vaccinations in One Site



<sup>\*</sup>Percent of operations with 1,000 head or more capacity giving nonclostridial vaccinations.

#### G. Internal and External Parasites

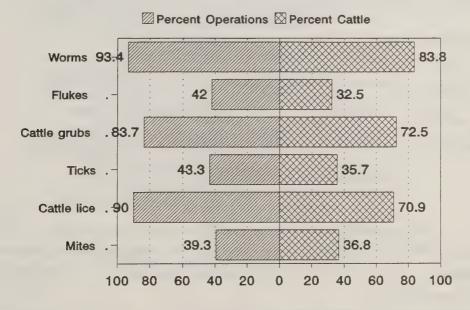
1. For large operations (1,000 head or more capacity), percent of operations with cattle suspected or confirmed to be infested with the following internal and external parasites:

Parasite	Percent Operations	Standard Error
Worms	93.4	(±1.1)
Flukes	42.0	(±1.8)
Cattle grubs	83.7	(±1.5)
Ticks	43.3	(±1.9)
Cattle lice	90.0	(±1.2)
Mites	39.3	(±1.9)

2. For large operations (1,000 head or more capacity), percent of cattle placed suspected or confirmed to be infested with the following:

<u>Parasite</u>	Percent Cattle	Standard Error
Worms	83.8	(±1.4)
Flukes	32.5	$(\pm 2.0)$
Cattle grubs	72.5	$(\pm 2.0)$
Ticks	35.7	(±2.3)
Cattle lice	70.9	$(\pm 2.1)$
Mites	36.8	(±2.5)

### Percent of Operations\* With Cattle (& Percent of Cattle) Suspected or Confirmed Infested with the Following Internal or External Parasites



<sup>\*</sup>Operations with 1,000 head or more capacity.

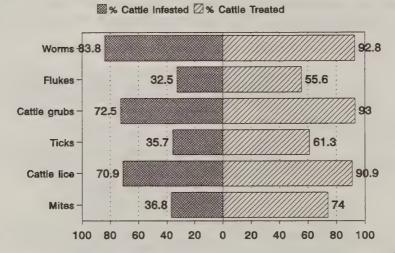
3. For large operations (1,000 head or more capacity), percent of operations that treated cattle placed on feed for the following internal and external parasites:

Parasite	Percent Operations	Standard Error
Worms	96.1	(±0.8)
Flukes	43.0	(±1.8)
Cattle grubs	89.0	(±1.3)
Ticks	44.5	(±1.9)
Cattle lice	96.3	(±0.7)
Mites	58.9	(±1.9)

4. For large operations (1,000 head or more capacity), percent of cattle placed on feed that were treated for the following:

<u>Parasite</u>	te Percent Cattle	
Worms	92.8	(±1.1)
Flukes	55.6	(±2.4)
Cattle grubs	93.0	(±1.0)
Ticks	61.3	(±2.3)
Cattle lice	90.9	(±1.1)
Mites	74.0	(±1.8)

### Percent of Cattle Placed\* Infested With and Treated for the Following Internal or External Parasites



\*On operations with 1,000 head or more capacity.

#2778

5. Percent of large operations (1,000 head or more capacity) using the following methods of fly control:

Method	Percent Operations	Standard Error
Manure removal	97.7	(±0.5)
Biological control (predatory insects)	28.1	(±1.7)
Ear tags	13.0	(±1.4)
Environmental sprays	53.7	(±1.9)
Pour-ons, dusting powder, or animal sprays	35.7	(±1.9)
Feed additive that kills larva	6.5	$(\pm 0.9)$
Traps	13.6	(±1.4)
Granular fly bait	77.6	(±1.7)
Other	7.4	(±1.0)

#### H. Mexican-Origin Cattle

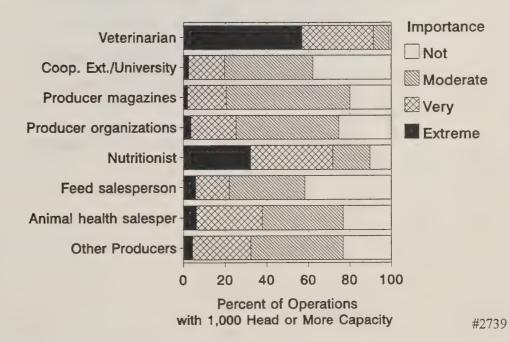
]	l. Per	cent of large operations (1,000 head or more capacity) feeding	g cattle originating from Me	exico at the same
t	ime as:		Percent Operations	Standard Error
	a.	U.S. beef cattle and calves to be used for breeding	1.1	(±0.4)
	b.	U.S. dairy cattle and calves to be used for breeding	0.2	(±0.1)

#### I. Information Sources

1. Percent of large operations (1,000 head or more capacity) by importance of animal health information source for the feedlot:

	Percent Operations by Importance of Source							
	Not	Standard	Moderately	Standard	Very	Standard	Extremely	Standard
Source	Important	Error	Important	Error	Important	Error	Important	Error
Veterinarian	1.0	$(\pm 0.4)$	7.6	$(\pm 1.1)$	34.6	$(\pm 1.9)$	56.8	$(\pm 2.0)$
Cooperative Extension								
Service/University	37.8	$(\pm 2.0)$	42.5	$(\pm 2.0)$	17.2	$(\pm 1.5)$	2.5	$(\pm 0.6)$
Producer magazines	19.9	(±1.6)	59.6	$(\pm 2.0)$	18.6	$(\pm 1.6)$	1.9	$(\pm 0.5)$
Producer organizations	25.3	$(\pm 1.7)$	49.6	$(\pm 2.0)$	21.6	$(\pm 1.6)$	3.5	$(\pm 0.6)$
Nutritionist	10.2	$(\pm 1.3)$	17.9	$(\pm 1.6)$	39.8	$(\pm 2.0)$	32.1	$(\pm 1.8)$
Feed sales person	41.7	$(\pm 1.9)$	36.4	$(\pm 1.9)$	16.2	$(\pm 1.5)$	5.7	$(\pm 1.0)$
Animal health salesperson	23.2	$(\pm 1.7)$	39.0	$(\pm 1.9)$	31.7	$(\pm 1.9)$	6.1	$(\pm 0.9)$
Other producers	23.1	$(\pm 1.7)$	44.6	$(\pm 2.0)$	27.9	(±1.8)	4.4	$(\pm 0.7)$

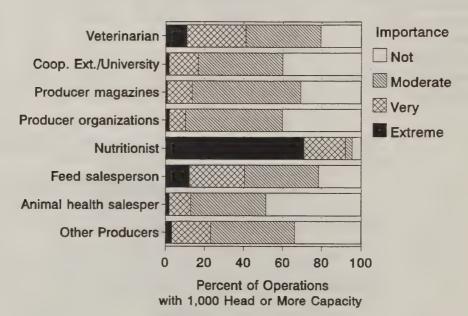
### Sources of Animal Health Information



2. Percent of large operations (1,000 head or more capacity) by importance of nutritional information source for the feedlot:

	Percent Operations by Importance of Source							
	Not	Standard	Moderately	Standard	Very	Standard	Extremely	Standard
Source	Important	Error	Important	Error	Important	Error	Important	Error
Veterinarian	20.4	$(\pm 1.7)$	38.4	$(\pm 2.0)$	30.3	$(\pm 1.8)$	10.9	(±1.1)
Cooperative Extension								
Service/University	40.1	$(\pm 2.0)$	43.2	$(\pm 2.0)$	14.9	$(\pm 1.4)$	1.8	$(\pm 0.6)$
Producer magazines	30.6	$(\pm 1.8)$	55.7	$(\pm 2.0)$	12.7	$(\pm 1.4)$	1.0	$(\pm 0.3)$
Producer organizations	40.1	$(\pm 2.0)$	49.6	$(\pm 2.0)$	8.2	$(\pm 1.0)$	2.1	$(\pm 0.6)$
Nutritionist	4.5	$(\pm 0.9)$	3.4	$(\pm 0.8)$	21.0	$(\pm 1.7)$	71.1	$(\pm 1.9)$
Feed sales person	21.5	$(\pm 1.6)$	37.8	$(\pm 1.9)$	28.4	$(\pm 1.9)$	12.3	$(\pm 1.4)$
Animal health salesperson	48.6	$(\pm 2.0)$	38.4	$(\pm 2.0)$	10.9	$(\pm 1.3)$	2.1	$(\pm 0.5)$
Other producers	33.7	$(\pm 1.9)$	43.0	$(\pm 2.0)$	19.9	$(\pm 1.6)$	3.4	$(\pm 0.7)$

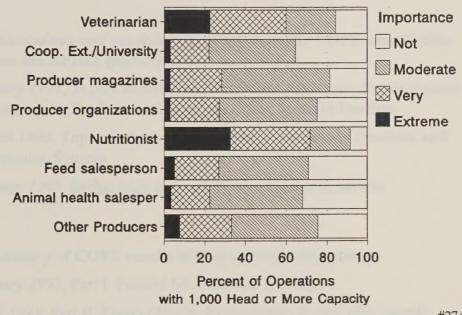
### Sources of Nutritional Information



3. Percent of large operations (1,000 head or more capacity) by importance of general production information source for the feedlot:

	Percent Operations by Importance of Source							
Source	Not Important	Stand. Error	Moderately Important	Stand. Error	Very Important	Stand. Error	Extremely Important	Stand. Error
Veterinarian	15.6	(±1.5)	24.4	(±1.8)	37.4	(±2.0)	22.6	(±1.5)
Cooperative Extension		(=1.0)		(21.0)	37.7	()	22.0	(=2.10)
Service/University	35.4	$(\pm 1.9)$	42.4	$(\pm 2.0)$	19.1	$(\pm 1.6)$	3.1	$(\pm 0.7)$
Producer magazines	18.6	$(\pm 1.5)$	53.1	$(\pm 2.0)$	25.3	$(\pm 1.8)$	3.0	$(\pm 0.7)$
Producer organizations	24.9	$(\pm 1.7)$	48.0	$(\pm 2.0)$	24.1	$(\pm 1.7)$	3.0	$(\pm 0.7)$
Nutritionist	8.2	$(\pm 1.1)$	20.1	$(\pm 1.7)$	38.8	$(\pm 1.9)$	32.9	$(\pm 1.8)$
Feed sales person	29.1	$(\pm 1.8)$	44.0	$(\pm 2.0)$	21.6	$(\pm 1.7)$	5.3	$(\pm 1.0)$
Animal health salesperson	32.0	$(\pm 1.9)$	45.5	$(\pm 2.0)$	19.0	$(\pm 1.6)$	3.5	$(\pm 0.7)$
Other producers	24.5	$(\pm 1.7)$	42.2	$(\pm 2.0)$	25.6	$(\pm 1.8)$	7.7	$(\pm 1.1)$

### Sources of General Production Information



### II. Sample Profile of Participating Operations

A. Participating Operations by Number of Placements Between July 1993 and June 1994

	Number of Operations		
	Small	Large	
Number Placed	<1,000 Head Capacity	1,000 Head or More Capacity	Total
1-2,499	908	135	1,043
2,500-9,999	4	131	135
10,000-39,999	0	116	116
40,000+	0	71	71
Not available (missing)	<u>_1</u>	_0	1
Total	913	453	1,366





# Materials Available from NAHMS

One-page discussions and graphic presentations of the COFE results (also accessable on the APHIS gopher):

- January 1995, Topics include Feedlot Quality Assurance, Environmental Monitoring by Feedlots, and Mexican-Origin Cattle in Feedlots
- March 1995, Topics include Injection Sites, Vaccination Practices, and Information Sources
- Summer 1995, Escherichia coli and Salmonella testing results

#### Tabular summary of COFE results with graphic presentations:

- January 1995, Part I: Feedlot Management Practices
- April 1995, Part II: Feedlot Health Management Report (this report)

Results of NAHMS studies are also available on the pork, dairy cattle, and beef cow/calf industries.



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